Supporting Economic Development Efforts with Recreation Information:

Development of the KREMMLING AREA MOUNTAIN BIKE GUIDE

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Abstract

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Title:

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Abstract:

Mountain biking use in Grand County, Colorado is increasing - bicyclists need information on where to go, land management agencies want to send bicyclists to the most appropriate places. Kremmling, Colorado wants to invite more recreationists to the area to assist with economic development. A mountain bike route guide is proposed to accomplish all three objectives. Extensive coordination is at the heart of the project. Through the use of a user preference survey the author determines the preferred format for the guide. Route selection criteria are used to determine the most appropriate routes. Computer-assisted drawing (CAD) and special software programs are used to develop detailed descriptions, route profiles, and maps for each route. The information is formatted to be used in the Recreational Opportunity Guide. Partners are solicited to provide funding for formal publication of a large map format of the guide.

Keywords: Mountain Bike, Bicycling, Economic Development, User Preferences, Route Guide, Partnerships.

Executive Summary

Title:

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Summary:

There is a need to provide information about suitable mountain bike routes in western Grand County, Colorado. Accomplishing the goal of producing a mountain bike guide for the Kremmling, Colorado area would also accomplish the following objectives:

1. Provide information to the increasing number of mountain bike riders in the area.

2. Assist land management agencies in directing use to appropriate areas.

3. Help the Kremmling Economic Development Committee meet it's objective of attracting more

A literature search provided some background but did not address the possible educational value of a guide or the economic benefits of providing this type of recreation information. Many potential routes were identified early in the process. A series of ten evaluation criteria were established to help determine which of those routes would be included in the guide. The criteria considered agency, private landowner, natural resource, aesthetic, biker preference and safety concerns. The evaluation led to 16 routes being selected for the guide. A survey was used to solicit responses from mountain bikers about what format they preferred for the guide. The survey gave examples from existing guides for type of map, description, elevation information, route classification or rating, and overall format of the guide. User preferences were tallied and a format proposed.

Collecting and formatting the information on each route was the major time-consuming part of the project. Detailed descriptions include 11 different categories of information. A profile was developed for each route that graphs the elevation gain and loss along the entire route. A computer generated map is also provided for each route. Each map is to scale and includes cultural and natural features, the route with

mileages, and a legend.

One user preference was to have a large map base format guide. This would also meet the needs of the Chamber of Commerce to have a product that would be easy to distribute. However, more time (and money) was needed to produce the map than was available for the Clemson Field Project. Therefore, the project was split into two phases. The first phase to produce the guide in the Recreational Opportunity Guide format was completed. The guides were distributed to area land management agency and Chamber of Commerce offices. The second phase requires additional work to find partners and a printer to publish the map format guide.

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Introduction

A. Purpose and Need

There is a need to provide information about suitable off-highway bicycle routes in western Grand County, Colorado, where there is currently no known information of that type. There is also a desire to assist the Town of Kremmling, Colorado in their economic development efforts.

Use of mountain bikes on National Forest Lands is continuing to increase. This is especially true in the Rocky Mountain Region, with many places in Colorado serving as vacation destinations for cyclists. Use of roads and trails by mountain bikers in western Grand County, Colorado is on the rise. Kremmling and the Middle Park Ranger District are at the center of a "high use triangle". Winter Park to the east, Steamboat Springs to the northwest and numerous towns in Summit County to the south are all within a one hour drive from Kremmling (refer to the Vicinity map in Appendix A). These towns have high resident populations of cyclists and host local and national races and events that serve as focal points for hundreds of individuals and numerous tour groups. Riders originating from or visiting these three areas are expanding into Grand County looking for new routes. There is a need to provide information on appropriate routes for these users from surrounding areas.

Local public lands which are managed by the U.S.D.A. Forest Service and U.S.D.I. Bureau of Land Management are appropriate for use by mountain bikers. Recent designation of Wilderness areas in the county has made some very popular mountain bike routes unavailable to mountain bikers. There is a need to provide information on alternate routes for these "displaced" users. By utilizing maps or route guides, mountain bike use can be directed to areas that best fit current management plans of the different agencies.

Kremmling, Colorado, located in the center of west Grand County, is working toward a diversified economy following the closing of a resident wood products mill. Many communities in this situation have found that supporting activities of recreationists, including mountain biking, helps to promote a desirable economic base. Goals of the Kremmling Economic Development Committee include marketing the recreational opportunities of the area and bringing in small businesses that provide support services, but maintain the existing quality of life. With Kremmling being located at the hub of the high use triangle, information about suitable routes can help attract bicyclists into the area.

B. Project Goal and Objectives

Complete a mountain bike route guide for the Kremmling area that,

- 1. Provides information to the increasing number of users in the area,
- 2. Assists local land management agencies in directing use to appropriate areas, and
- 3. Helps the Kremmling Economic Development Committee meet its objectives of attracting more visitors to the area.

C. Personal Goals

The project goal was guided by a number of personal goals:

- 1. Complete a project, not a "research paper"; something that would be of direct and immediate use to the Middle Park Ranger District.
- 2. Do something that would facilitate learning; perhaps go through a new process, or learn new technology.
 - 3. Tie in with economic development efforts of the local community if possible.
- 4. Do a project that would utilize part of what had been presented at the Clemson "on-campus" segment.
 - 5. Do as complete a job as possible.

D. Audience

The primary audience, or user of the product, will be beginner to expert mountain bicyclists. The guide will be written to draw their attention to the attributes of western Grand County and the Kremmling area. The end product will be designed to provide the most benefit to the Town of Kremmling. Other users of the guide include local land management agency personnel. They will use it to provide information on land use ethics to bicyclists and to coordinate mountain bike use with other management activities.

Methods

A. Objectives

The original objectives outlined in October, 1993, listed 14 steps that were needed in order to complete the project in six months. When completed, the 14 steps would assure that the draft Clemson paper was written and a guide would be produced that would meet the following three objectives.

- 1. Provides information to the increasing number of users in the area,
- 2. Assists local land management agencies in directing use to appropriate areas, and
- 3. Helps the Kremmling Economic Development Committee meet its objectives of attracting more visitors to the area.

These objectives were continually reviewed as the project progressed. The methodology used to accomplish some of the key objectives is described below.

B. Coordination.

Coordination is critical to any project such as this that involves outside groups. Local, state and federal agencies, private individuals, planning groups and existing and potential users will all need to be contacted. Initially it will be necessary to discuss the project with each of the involved groups to refine the problem and gain insight about the feasibility, appropriateness and desired outcome of the project. This will require phone conversations, and individual or group meetings. In some cases it will require subsequent updating meetings.

C. Do Literature Search.

Perform a review of available literature to provide information to strengthen, refine and support the project. This will require a library search, a review of literature available through FS INFO, a search in bookstores, bikeshops and through personal contacts (for existing route guides), and a review of management agency policy and guidelines.

D. Determine Route Selection Criteria.

A process needs to be developed to logically determine which routes should be included in the guide. A series of questions is listed in the Trails Management Handbook (FSH 2309.18) which provides some guidance on what to consider when planning routes.

E. Select Routes.

Proposed routes will be identified based on personal knowledge, and discussions with mountain bicyclists and management agency personnel. The Bureau of Land Management (BLM 1993 b) provides some guidance for the type of routes to be considered. Each route should meet most or all of the selection criteria and must be approved by the administering agency and any directly affected private landowners.

F. Determine User Preferences for Format of Guide.

Little information on user preferences for route guides is available in the literature. It will be necessary to develop a survey for cyclists to identify their preferences.

G. Write Descriptions and Develop Maps.

This will require gaining accurate information about the routes and presenting it in a fashion that is clearly understood by the using public. It will be important to make sure that routes are described and mapped as accurately as possible. The BLM (1993 b) and McCoy (1992) suggest the type of information that could be provided in a guide. The type and amount of information may vary based on the desires of the users and the final format selected for the guide.

H. Format the Guide and Locate Partners.

The desired end product will be based on what the users want and what the Town of Kremmling and the Kremmling Chamber of Commerce think will work best to market the area. It will be necessary to find partners for financial backing to pay the costs of printing, the amount of which is dependent on the format.

I. Evaluate Project.

It will be important to evaluate the project to determine if goals and objectives have been met, to review changes in the project as it progressed, and to discuss problems that were encountered.

Background

A. Literature Search.

With mountain biking being such a popular activity, it might be expected that a lot of information would be available. Most of what is available (in mountain biking magazines) is about fitness, trails and technology. In recent years many Clemson and Utah State Recreation Shortcourse field project papers have covered different aspects of mountain biking. Many of these dealt with the issue of conflicts between different user groups. Although recognized as a valid concern, conflict resolution is not currently a significant issue in this area. Instead, the literature review for this project focused on the personal or educational value of providing a route guide, and economic benefits of providing recreation information. Variations of the following key words were researched: mountain, bike, bicycle, guides, route, trail, user information, recreation, leisure, economics, value, economic development, off-road travel, non-motorized, fitness, and exercise. Little information that was relevant to the objectives of this project was found.

1. Periodical Review.

A periodical index review was completed for the years 1991 to 1993, but only 17 articles were referenced that dealt even remotely with the topic. Because the library in Kremmling is small, few of the magazines were available, and the inter-library loan program was cost prohibitive. Only a few periodicals were reviewed and none are referenced.

2. FS INFO.

Using the Forest Service research library through FS INFO was a little more successful than the periodical review. Twenty-seven different combinations of key words were used for the search. Thirty-nine references were identified, but only about half were considered for further review based on their titles. Some of these are referenced in the paper.

3. Review of material from other sources.

Forest Service Manuals and Handbooks relating to recreation, trails and transportation were reviewed. In addition, reference material was obtained through personal communication.

4. Search for bike route guides and maps.

This was the most successful part of the review. Over 30 different examples of guides were compared for their attributes and quality. These guides are listed in Appendix C.

B. Statewide Comprehensive Outdoor Recreation Plan (SCORP)

1. What is SCORP?

The Colorado Statewide Comprehensive Outdoor Recreation Plan (SCORP, 1992) is used in conjunction with other strategic documents to chart the course for recreation in Colorado. One of the most important elements in the SCORP is the identification of outdoor recreation issues of statewide importance. The Colorado SCORP uses a three step process to solicit public involvement and to provide the data needed for issue identification. This focuses attention for appropriate actions among federal, state, and local recreation providers for the five year SCORP planning cycle.

2. Issues and needs related to mountain biking in the Kremmling area.

In the counties surrounding Kremmling and throughout the State of Colorado, mountain biking is an important activity. According to SCORP, there are important issues related to this activity. Colorado is broken into 14 regions to identify issues of regional importance. The Kremmling area, in Grand County, is part of Region 12 which includes five other counties. These counties have most of the largest ski areas within the state, many of which cater to mountain bike riders in the summer months. Public input was aggregated for three aspects of recreation - issues, facility needs, and visitor needs (SCORP, 1993). Trails and bicycling, as general categories, were rated as having high importance and high need for this region. The issues related to these activities (out of a total of 48 statewide issues) are listed below:

Issues of Importance
#1 - Recreation trails opportunities
#8 - River corridor trails
#10 - Trails development funding source
#10 - Trails in backcountry and open space (tied)
#17 - Management of mountain bikes

The facility and visitor needs related to biking (out of a list of 50 statewide needs) are listed below:

Facility Needs
#1 - Pleasure Biking
#8 - Mountain Biking

#10 - Tour Biking

Visitor Needs

#1 - Mountain Biking

#9 - Pleasure Biking

#19 - Tour Biking

3. Issues of Statewide Importance.

Of the list of 48 statewide issues, two in the top ten relate to mountain biking and trail use - "Recreation trails opportunities", and "Trails development funding sources". Based on the input from the public and land management agencies, it is evident that great efforts and funding need to be put towards providing opportunities for mountain biking.

C. Historical and Future Use of Bicycles.

1. History of General Bicycle Use.

With the development of the "safety bicycle" around the turn of the century, bicycles began to become a standard household item. Sales and use have fluctuated over the years, based on social and economic factors. In the 1970's there was a rapid rise in bicycle use and the "ten speed" was popular with young adults and teens. In 1992 there were an estimated 99 million bicyclists in the United States - 55 million adults and 44 million children (Schubert, 1993).

2. Mountain Bike Use.

Since its introduction in 1979, mountain biking has grown from a regional fad into a nationwide fascination, especially among youth. Today an estimated two million teens ride mountain bikes in the United States (Frey, 1993). While this is only a small percentage of the 44 million children who bicycle, it does show a significant increase from the 55,000 teen riders in 1983 (BIA, 1993). Adults have not been content to let the children have all the fun. Many of the adults were still in the youth category during the early years of mountain biking history and found that they didn't have to give up this form of travel and recreation as they grew older. Of the 99 million cyclists in 1992, 25 million were mountain bikers, the fastest growing category of riders. Figure 1 shows a summary of bicycle use and the increasing proportion of mountain bikers compared to other cyclists. From less than one percent in 1983 and 1984, mountain bike use exceeded 25 percent of total use in 1992. It was estimated that there would be a 20 percent increase in mountain bike riders from 1992 to 1993 (BIA, 1993).

3. Mountain Bike Sales.

Mountain bike sales give another indication of the use trend. The advancement in the manufacturing industry, primarily due to the availability of lighter weight, sturdy materials, has really made the mountain bike a preferred model. Since around 1987 and 1988, the sale of racing, touring and other lightweight bikes has steadily dropped, and children's bikes has leveled. Mountain bike sales, however, have risen sharply

over the last five years. See Figure 2, Bicycle Sales Chart, for data from 1983 to 1992.

Figure 1, Bicycle Use Summary

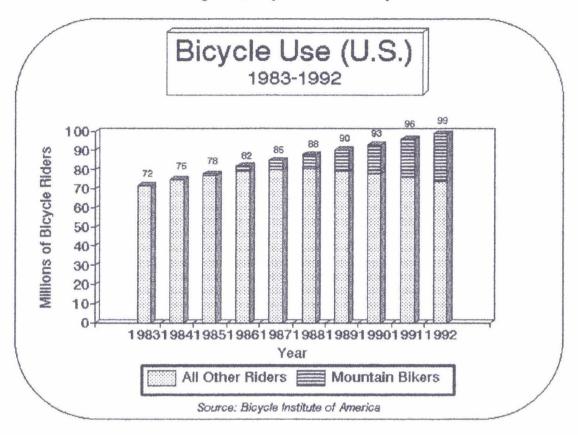
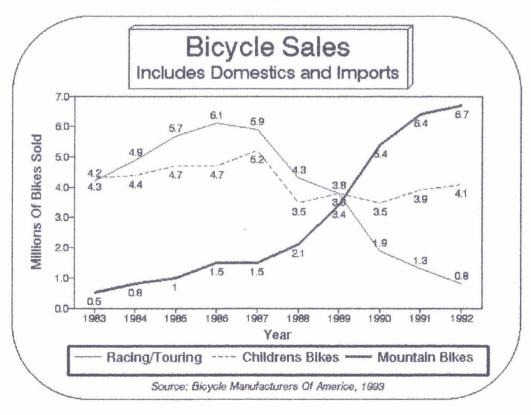


Figure 2, Bicycle Sales



4. Future of Mountain Biking.

Mountain bike use in Colorado is increasing faster than in most parts of the country because of the terrain and abundance of public land to ride on. Several major tourist destinations for mountain bicycling that cater to both in-state and out-of-state tourists have opened in Colorado (Macdonald, 1992). Colorado continues to get recognition as a great place to mountain bike, and, subsequently use continues to rise. Use on National Forest System and Bureau of Land Management administered lands is steadily increasing. Estimates of use in 1993 on the Routt National Forest totaled 54,000 (Hoffheins, 1994). Almost half of that use occurred around the Steamboat Ski Area. As use is increasing there is a need to make a concerted effort to provide opportunities for mountain bikers.

D. The Management Setting.

1. The Forest Service.

Kremmling lies at the center of the Middle Park Ranger District. Management of the National Forest System lands is important for current as well as future residents. The U.S.D.A. Forest Service has had a fairly open approach to mountain bike management since the use became popular in the early 1980's. With an objective to provide "non-urbanized outdoor recreation opportunities in forest and rangeland settings" (FSM 2300), the Forest Service has accepted mountain bike riding as an appropriate recreational activity. There are many places nationwide where Forest Service managers are having to deal with conflicts between different users. Hain (1986), Grost (1989), Lloyd (1990), and Watson (1991) all describe conflicts related to mountain biking. The addition of mountain bikes (primarily to single-track trails) has raised issues of safety and whether they are appropriate for the trails. In most cases the safety concern is a real one. Mountain bikes can travel much faster than either horseback riders and hikers and can come up on these other users rather unexpectedly. Land managers have responded to this issue in a variety of ways ranging from prohibiting use of mountain bikes, to requiring the bikes to have horns or bells, to just trying to educate users with signing.

The issue of whether mountain bikes are appropriate in certain areas and on certain roads or trails is both a legal and personal concern. Bicycles are not allowed in designated Wilderness areas because they are not compatible with, "...a primitive and unconfined type of recreation", as called for in the Wilderness Act (Act, 1964). Some people still ride illegally in wilderness. According to Lloyd (1990), "providing legal opportunities is the key to good management. By providing education (information) on where to ride, it is

hoped that the numbers of illegal riders will decrease."

Mountain bikes are, however, allowed on just about all other lands administered by the Forest Service. It is Forest Service policy to "...provide a diversity of trail opportunities for experiencing a variety of environments and modes of travel" (FSM 2300). Therefore, "mountain bikes can be ridden on hiker, pack and saddle, and motorized bike trails and four wheel drive ways" (FSH 2309.18). Conflicts still occur. Aside from the safety concern the issue is often just related to personal user preferences. Lloyd (1990) states that, "over time, people may come to use a particular area more for it's qualities and the personal attraction it may have rather than the activities it provides. This attachment can be very strong and a sense of possession develops as well as definite ideas on how the area should be used". Grost (1989) quotes a trail ranger, "If the mountain bike had been around for 200 years, and the horse was just being invented, the horse would have the same trouble being accepted on the trail."

The greatest conflicts occur when there are limited opportunities and/or large numbers of users. In the Kremmling/Middle Park area existing use is fairly low for hiking, mountain biking and horseback riding. Identified conflicts are currently almost nonexistent and are expected to remain low. With proper signing and information the existing (historical) users should not feel like they are being displaced.

2. The Bureau of Land Management.

The Kremmling Resource Area, administered by the Bureau of Land Management (BLM) has a big influence on the Town of Kremmling. The BLM lands located directly adjacent to town provide many opportunities for locals and visitors to recreate. The BLM not only allows but promotes mountain bike use on the lands they administer. Since the World Mountain Bike Championships in 1990, the BLM has worked to strengthen their involvement in mountain biking activities. Hundreds of miles of routes have been identified and their long term goal is to "inventory, sign, and map 20 percent of the (almost one million miles of) BLM trails and primitive roads" (BLM, 1993 a). The BLM likely deals with the same issues of conflict that the Forest Service does but it was not documented in the literature reviewed. A mountain bike policy that the BLM has developed (BLM, 1993 b) includes these elements:

- o Mountain bicycling is a legitimate use, part of the family of trail uses.
- o All roads and trails are open to mountain bikes unless designated closed.

3. The State Land Board.

The State Of Colorado has thousands of acres of land in the area surrounding Kremmling. The State

Land Board through the direction of the Board of Land Commissioners (Board) manages these lands for economic returns to the treasury. These funds are used for improvements in the public school system. Recreational use in the past was mostly restricted to big game hunting by individuals who also held agricultural leases on the land. In November 1992, the State Land Board adopted a multiple-use policy which allows for wildlife-related recreational use on some of these lands. This use, however, is limited to hunting during the fall seasons. Adding new users, specifically by identifying mountain biking routes, is currently not appropriate (McCarty, 1993). It is unlikely that this issue would go before the Board within the next year.

E. The Economic Development Aspect of the Project.

Economic development can take many forms. Many communities have had to deal with the hardships associated with the rise and fall of their economic base. This often happens when a community is dependent on some kind of extractive industry like mining or logging, and the market "goes bad". It's not uncommon for a community to turn to providing recreational opportunities to try to improve their economy because recreational spending stimulates a considerable amount of economic activity in rural economies (Bergstrom, 1990). There are sometimes drawbacks to the efforts, but communities can benefit economically from providing expanded recreational opportunities. Benefits can either be direct, indirect or induced. For example, in Colorado touring bicyclists spend \$17 per day if camping and \$50 per day if staying ouernight in motels (Mcdonald, 1992). Service businesses directly benefit from this spending. Indirect benefits, according to Johnston (1976), are the measures of economic gain that most communities see. Approximately one-third of the value of direct recreational expenditures accrue as indirect payments to households in the local area. For example, when a tourist pays for a motel room, it's not just the motel owner that benefits, but also the maid that cleans the rooms. The overall benefit to a community's economic base is also from induced benefits. According to Cordell (1991), induced effects come from the subsequent spending of local employees and managers, and the resulting demand for and production of goods and services. Therefore, businesses in a small community can benefit from outside sources (recreationists) and from local residents.

1. The Town of Kremmling.

Kremmling is located in Grand County, Colorado, which is in the north-central part of the state.

Much of the local community's economic history has been based on a reliance on both mining and logging activities. While many of these activities (and their support to the tax base) have decreased over the past

decade, a big blow came with the announced closure of the local Louisiana Pacific waferboard plant. The impact of losing 100 mill jobs and 50 -100 related logging and support jobs could have been severe for the small, rural community of under 1,200 people (EDC, 1994).

2. The Economic Development Committee.

In anticipation of the closing of the mill, the Kremmling Economic Development Committee (EDC) was formed in November, 1991. The overall goal was to attract and sustain a diverse business sector. The objectives of the EDC range from providing job opportunities to building a positive community attitude. One objective is to increase recreational opportunities for visitors and residents. The economic intent is to attract visitors and to build up a service industry to support their activities. Kremmling is at the intersection of two major highways, with just under 1 million vehicles passing through annually (EDC, 1994). The potential to "capture" some business from these travelers is great.

3. The EDC Action Plan.

The Kremmling community has aggressively pursued a variety of projects (24 total) to create a network of diversification to achieve economic stability. The projects related to recreation that have been initiated by or supported by the EDC include:

- o Colorado River Headwaters Scenic Byway designation
- o Log Cabin Heritage Museum
- o Wolford Mountain Reservoir development
- o Upper Colorado River Alliance integrated resource management plan
- o Regional Information Center
- o Kremmling Recreation Complex
- o Trails System Network
- o Williams Fork Recreation Development

The proposed designation, mapping and advertising of mountain bike trails in the area fits in with many of these projects. As a result, it was well supported by the EDC and the Town of Kremmling, and was added to the Action Plan (refer to Appendix D for the Action Plan).

4. Kremmling Area Trails Association.

A group of motorized, non-motorized, winter, and summer recreation enthusiasts joined together in 1992 to form the Kremmling Area Trails Association (KATA). This informal group gathered to identify needs and priorities for trails in the Kremmling area. One objective of KATA is to focus on establishing trails linkages from downtown Kremmling to trails networks on the pubic lands in surrounding areas.

5. Can this Project Help with Economic Development?

There is plenty of support or direction to provide information like the proposed mountain bike guide to the public. The Middle Park Ranger District wanted to provide something to the users to help distribute use. The State Recreational Trails Committee identified 13 Recommended Actions to be undertaken by a variety of local, state, and federal agencies. One of these Actions was to encourage better availability of trail maps and information to both residents and tourists (Macdonald, 1992). More specifically the committee suggested that "local communities, publishers, and federal agencies produce maps for local areas and highlight trail opportunities for particular user groups". The Trails 2000 Handbook (BLM, 1992) spells out six strategies for implementing an effective mountain bike management program. One of these is to develop sub-regional trail brochures that can be inexpensively printed, mailed, and used by the public.

Despite all this "direction" to produce a guide, it was unclear whether it would work to facilitate economic development. No direct link, between the production of an individual product, like a trail guide, and the resulting increase in tourism was cited in the literature reviewed. Increases in tourism more typically seems to be based on a combination of marketing efforts. The expectation that the guide will help to draw in additional visitors or have them stay longer as they pass through the area is reasonable. According to Bergstrom (1990), "economic development can be facilitated by increasing out-of-region visitation through promotion of local recreational opportunities". It should be noted however, that this project is expected to play only a small part in the actual economic development for the community. Based purely on people seeing the guide, as few as 25 to 50 people per year may be enticed to come to Kremmling and spend their extra time and money. The assumption made here is that the guide will be of benefit to the Town of Kremmling, even if only in some small way.

Results

A. Coordination

Coordination was a very important part of this project. It was also quite time consuming and led to many of the delays. The need for coordination can be broken into four areas:

- o Approval of the project and routes, and collection of information.
- o Determining user preferences and obtaining examples of existing guides.
- o Information Sharing and Community Involvement.
- o Partnerships for funding.

Appendix H displays a table of most of the contacts that were made for the four different areas. The following summarizes some of the key contacts for coordination.

1. Forest Service.

The scope of this project covered the western part of Grand County, Colorado. Although mostly administered by the Middle Park Ranger District, three other districts manage small portions of the grand County area. Three additional districts could have been impacted by proposed routes that lead onto their lands. Each of the rangers for the seven districts, as well as the Routt National Forest Supervisor, Program Manager, and Recreation staff specialist, were contacted to get their approval and suggestions for the project. All gave their support for the project and usually identified someone to be a contact on their unit.

Information was collected from various employees about specific proposed routes and the possible resource impacts that use would cause. Computer training and assistance was gained from Middle Park Ranger District employees. Additional contacts were made with personnel in the Rocky Mountain Region's regional office for reference material, information about a large scale map base, and to discuss funding sources. State and Private Forestry was contacted about rural development grants.

2. Bureau of Land Management.

Initial contact was with the recreation manager in the Kremmling Resource Area office to discuss possible routes on their land. Because Bureau of Land Management (BLM) administered lands lie directly adjacent to the Town of Kremmling, routes on those lands were important to help meet the economic development aspect of the project. After initial notification, coordination continued throughout the six months of the project. The local Area Manager, environmental coordinator and recreation manager either

attended meetings, worked on committees to help guide the process, or provided review of materials. The BLM's State Mountain Bike Coordinator assisted by providing information on possible partnerships. Some local BLM personnel were enthusiastic about the project and recommended numerous routes. However, numerous local BLM employees were not supportive of the project. One concern was that the publishing of the guide would "advertise" the area and attract too many bicyclists, motorcyclists, hunters and 4-wheel drive enthusiasts. Most of these concerns were not raised till very late in the six month process.

3. Colorado State Land Board.

State administered lands are scattered throughout the western part of Grand County. There was some potential to include routes on those lands. As a result of initial conversations with the district manager, it was decided to not include any routes on State Lands, because that type of recreational use was not consistent with their policies. Later in the project it was discovered that a portion of two routes was on State Land (maps show it as BLM land). They were important routes because they started from town and provided an easy and a more difficult route. After an on-ground meeting and numerous phone conversations, the State Land Board agreed to be a cooperator and allow the use of existing roads on the parcel of land near town.

4. Town of Kremmling, Kremmling Area Chamber of Commerce, Economic Development Committee.

The project was envisioned to benefit the Town of Kremmling's economy. In the beginning it was necessary to confirm the project goals with the objectives and plans of these local groups. Initial coordination was difficult because the Town Manager position was vacant and the Chamber Manager was new. Once selected, the new Town Manager was only in place for two months before he resigned. The Economic Development Committee (EDC) was the best place to gain and provide input on the project. Since the EDC is a sub-committee of the Chamber, and the Chamber works for the Town, there was a process, although perhaps a little disjointed, to work together. Becoming a member of the EDC was important and, as a result, regularly scheduled meetings were attended to keep the committee informed of the status of the project.

5. The Upper Colorado River Alliance and Headwaters Trails Committees.

Both of these are county-wide planning groups that address recreation related development. It was valuable to participate in their regular meetings to discuss their objectives and be able to fit those into the project. The meetings also provided a chance to keep the groups updated on the status of the project.

6. The Division of Wildlife.

In Colorado, the Division of Wildlife (DOW) has the authority to manage the state's wildlife, even on federal land. The DOW was consulted concerning possible wildlife impacts from use of the proposed routes. Six Wildlife Officers and a Terrestrial Habitat Manager reviewed the proposed routes. Significant concerns were raised about some routes while others posed no problem. While the officers could not state the actual negative impact from mountain biking, most were concerned about increasing recreational use on public lands. Some of the routes that DOW had concerns about were dropped from further consideration, while others only required that statements about "seasonal restrictions" for the public be added to the descriptions.

7. The Colorado River Water Conservation District (Water District).

The Water District is in the process of developing a reservoir five miles north of the Town of Kremmling. Efforts were made to plan some mountain bike routes so that they will tie into the proposed recreational trails for the reservoir. While the project manager was enthusiastic about trails, he stated that the trail plan had not been completed. Conceptual ideas were discussed and two routes were finally selected that should eventually tie into trails leaving the reservoir.

8. Area Bicycle Shops and Bike Club.

Neither a bicycle shop or club exist in Kremmling. In order to get input from mountain bike riders, it was important to work with surrounding shops and a club from surrounding communities. This was also desirable, since most of the area riders live in these surrounding communities. Four bike shops - one in Granby, one in Frisco, and two in Steamboat Springs - distributed the preference survey to their customers. A bike club in Winter Park and Fraser distributed the survey to some of it's members.

9. Private Landowners.

Because there is plenty of public land in Grand County, the initial proposal of routes intentionally avoided private land. Some routes did pass through private land but utilized well traveled public right-of-ways for access. One of the routes ended up crossing private land that originally was thought to be managed by the Bureau of Land Management. Following discussions with numerous people, approval was given to use the route.

10. Working Committees.

Throughout the project various people were consulted for their input concerning aspects that were

outside of normal Forest Service Management. Two working committees, including local representatives from the Chamber, the County, BLM, a Trails Management Consultant and private individuals, assisted in collecting information about format and prices of guides and possible partners. This information was used to determine the final product for the Chamber route guide (Phase 2 of this project).

11. Partnerships and Grants.

The initial phase of this project does not have a direct cost associated with it. Salary and equipment to produce the Recreational Opportunity Guide information and complete the paper were covered by the Forest Service. The second phase is one where as much as \$12,000 may be needed to provide a product for distribution through the Chamber of Commerce. Coordination was necessary with numerous groups, organizations and businesses. These potential partners with their donation of time and money will help make the final route guide a reality. Ray Rasker from The Wilderness Society began the partnership drive and obtained a \$1,500 donation from within the Society. In addition, he set the groundwork to have a bicycle (valued at \$1,200) donated by Specialized Bicycles to be used in a raffle. The Kremmling Rotary Club was contacted and agreed to help raffle the bike (a State license is required), with proceeds going to the Chamber of Commerce. M.D.G. and Associates, a Denver-based consulting firm, helped design posters to advertise the raffle.

Contacts were made in an attempt to acquire a grant from the State of Colorado. Local representatives from the BLM, Town, County, and Chamber as well as the State Trails Coordinator were contacted about the grant. The process was set up so that the request had to be submitted through the Town, and it in turn needed to accept responsibility for providing matching funds. At the time that the grant process was open, there was not a town manager, and the Town Board members did not feel comfortable accepting that responsibility, and thus the proposal was dropped. A separate grant application for \$5,000 was submitted to the Grand County Colorado Tourism Board - the result of which is still pending.

B. Determining Route Selection Criteria

Criteria were established to help select routes that should be included in the guide. The criteria were summarized from personal experience as a mountain biker and resource manager. In addition, a mixture of ideas from other individuals and the objectives of this project helped to shape the criteria. The many questions listed as "Information needs" when planning a trail system in the Forest Service Trails

Management Handbook (FSH 2309.18), were also used as guides for determining criteria. Most of these considerations are incorporated in the criteria below. (Note that one or two key words are underlined in each criteria statement. These key words are used to identify each criterion in the chart in Appendix E, Evaluation of Routes.)

1. Route meets the plans of management agencies.

2. Route does not cross private land unless permission is granted.

3. Route provides challenge and/or a variety of scenery.

4. Route is available for use through more than one season.

5. Route should attract visitors to **Kremmling.** (Some should start and/or finish in town.)

6. Route should minimize conflicts with other users.

7. Route can help disperse use from existing high use areas.

8. Route located so that the use by bicyclists should not cause unacceptable resource impacts.

9. Route fits the Recreational Opportunity Spectrum (ROS).

10. Route does not have any unusual safety concerns.

C. Selection of Routes

With hundreds of miles of roads and trails existing in the western part of Grand County, there are many opportunities for mountain biking. When identifying potential routes to be included in the guide, attributes of popular existing routes were considered. Lloyd (1990) surveyed 91 mountain bikers in California and found that they liked routes with the following key attributes: 1) were on trails versus roads, 2) were loop routes rather than going and coming on the same trail, 3) were around 20 miles long, and 4) had varied terrain. Gary Lunsky, a Frisco, Colorado bicycle shop owner expressed the need to emphasize "single-track" trails. The Headwaters Trails Committee has emphasized the need to develop a regional trails system with longer routes that would link the different communities in the county. The Yampa Valley Outdoor Recreation Conceptual Plan (Yampa, 1992) has an objective to consider opportunities for trail connections to Rifle and Kremmling, Colorado. Numerous sources including BLM (1993 b) emphasize the need for a variety of scenery and difficulty when considering multiple routes.

In the beginning, almost 50 different routes were identified through an informal process, by local bikers, and Forest Service and Bureau of Land Management personnel. This first list was trimmed down to 32 possible routes and then a more formal review was started. The 32 routes were evaluated against the criteria (see Appendix E). Some external input, such as that of the Division of Wildlife, helped with the selection. Although the criteria were not weighted, some did carry a level of importance greater than others. For example, if a route did not meet the "private land" or "resource" criteria, it was dropped from further consideration. In another example, if a route did not start and/or finish in Kremmling, it was not rated down.

To be a preferred route, most if not all of the criteria should be met. Appendix E displays the evaluation of the suggested routes. In the chart, if a route meets the criteria it gets a (+); if it was questionable whether it met the criteria or only partially met it, it got a (o); if it did not meet a criteria it got a (-); and, if it met it but there was some special conditions, then it got a (*). The Comments section in the chart summarizes the reason(s) why a route was dropped from further consideration, or lists a special note that should be added to the description of the route. As a result of the evaluation, 16 routes were selected for the guide.

D. Determining User Preferences

Providing information is only one of the many ways that the Forest Service provides service to the public. Frequently though, it seems that little attempt is made to find out how the format of the information affects the use of the product. Some assumptions were made at the beginning of this project about the type of guide that should be produced. Since it was desirable to provide a guide that would be useful to a wide range of bicyclists, it was recognized early on that there was a need to find out what the potential users would like. Some guidance does exist about the type of information that should be provided (BLM, 1993 b). The actual format still needed to be determined. In order to find this out, the following steps were taken:

1. Review existing guides.

The first step to figuring out what format might work best was to locate examples to choose from. Over 30 different mountain biking route maps or detailed route books were obtained and reviewed (see Appendix B). These guides, from California to New York, and from Oregon to New Mexico, provided a look at a wide range of options to providing route information. Some were very simple with nothing more than a generalized large scale map with highlighted and named routes. Others were very detailed and included maps with accompanying descriptions that even told the reader about site specific details such as muddy or sandy areas, viewpoints and water sources. New and previously unknown examples were discovered, such as shaded relief or three-dimensional maps. Each publisher probably had a specific purpose behind their particular format and, hopefully, they met their objective with the public. In many cases the format seems to be related to cost. Guides that were free to the public were generally the least detailed. Those that were for sale, ranging from \$5.00 to \$13.00, generally were fancier, more detailed, and included some of the most complex cartographic techniques.

2. Surveying the users.

The next step involved going out to the public. A series of questions about what type of maps,

descriptions, etc., could be provided, was developed. Examples from some of the existing guides were included with the questions. A few other questions were included to help determine if the responses would vary based on a person's riding ability (refer to Appendix F for an example of the survey).

The survey was distributed through bicycle shops in three different towns, through a bicycle club in a fourth town, and to selected individuals in Kremmling. No instructions were given to distributors about who they should give the surveys to, although respondents with differing ability levels were desired. The bicycle shops generally had the surveys available at checkout counters, and people usually filled them out on the spot.

3. Survey results.

Forty completed surveys were returned. Responses were summarized and tabulated by rider ability level. The riders were not given any guidelines of what it took to be in one class or the other, they just rated themselves.

- a. Respondents' ability level The largest number of respondents were Advanced, followed by Intermediate, Expert, and Beginners (refer to Figure 3, Survey Respondents). While it was desirable to have a fairly even split between the ability levels, the shortfall in beginner level respondents is explainable.
- i) The survey was distributed mostly through bicycle shops and a bike club. Fewer beginning level cyclists frequent the shops or join bike clubs as compared to those of higher level classes.
- ii) The survey was distributed during the late fall and early winter. Many beginner cyclists do most of their riding just during the summer months. Even if they did frequent the shops, it typically would not be during that "off-season" time of year.

b) Type of Map

Options were given and displayed for no map (None), Hand Sketched Map, computer generated Line Drawing map, map with Topographic base, and Three-dimensional map (showing a grid net that illustrates topography). While four options were rated fairly high (nobody selected "None"), computer line drawings and topographic maps were preferred (see Figure 4, Map Type, for a display of responses). Computer generated line drawings will be used in the Recreational Opportunity Guide (ROG). This will make the cleanest copy when the ROG sheets are reproduced. In addition, the extra storage space needed for topographic and three-dimensional base maps was considered a detriment to storing the data in an interactive video display system. The high preference for a topographic base will not be ignored, however.

This can be provided by using a contour map as the base of the area-wide map for the Chamber of Commerce (discussed later).

Figure 3, Survey Respondents.

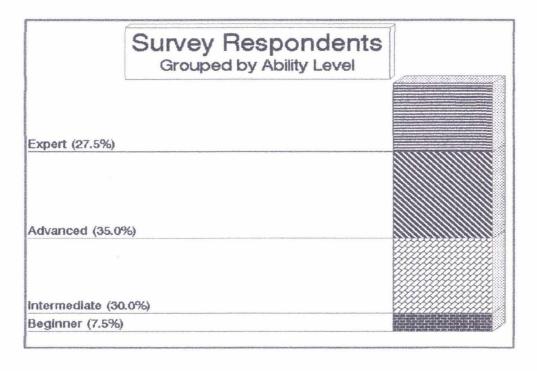
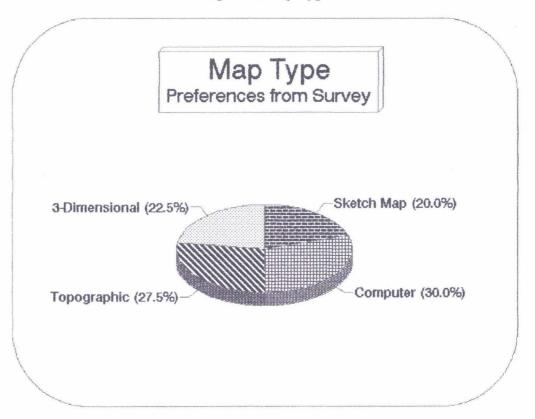


Figure 4, Map Type



c) Description

Survey respondents were given a choice of no description (None), a Simple description that mostly just gives general comments and maybe some brief directions, a More Detailed one that includes mileage and some route characteristics, and a very detailed one (Most Detailed) the could even include information about the local history or about features of, or on, the land. Respondents preferred the most detailed description possible (see Figure 5, Description Type, for a display of the responses).

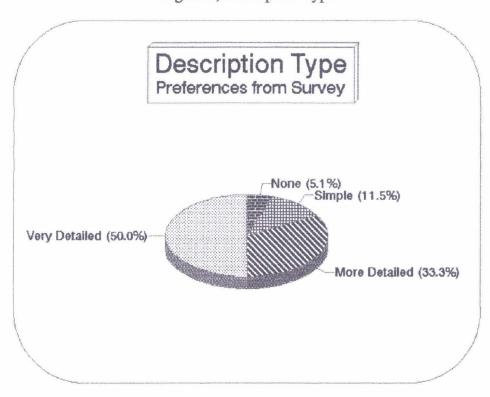


Figure 5, Description Type

The preference for a detailed description conflicts somewhat with the desire for a large foldout map. In many versions of route guides, a user generally can get either a map with no description of the routes, or a book with detailed descriptions but no large scale map. Logistically it is not feasible to include a very detailed description on the back side of a map, unless the number of descriptions was reduced significantly. In recent years, some publishers have combined the two ideas to produce a map with routes displayed on one side and brief descriptions on the other. Two respondents' comments are worth noting here.

i) "It would have been better to provide descriptions of the same route when displaying the different levels of detail." This makes a lot of sense, but it was not possible since examples from actual guides were displayed.

ii) "The type of guide I would want depends on where and for how long I plan to ride." This comment was discussed with the person for more clarification. The idea was that if he was going to be in an area for a short time (1-2 hours), then he mostly just wants to know where he can ride, and doesn't need detail. However, if he's planning to go to an area for 2-3 days with riding being his main activity, then he wants much more detail so he can plan his trip with a mixture of full day, half-day and 1-2 hour rides. Typically a person does not have the option for two different types of guides. It was assumed then, that the respondents answers to the questions were based on the particular times that they would most want a guide.

d) Elevation Information

Riders often like to know such things as whether they will be riding at low or high elevations, how much climbing they will have to do (or how much descending they will get to do), etc. While this can be provided in a narrative, it's often hard to get an understanding of the overall layout of the route. It's easier if the information is displayed somehow. Respondents were given a choice of no listed or displayed elevation information (None), a Table listing the changes in elevation, a graphic chart or Profile that depicts the changes as they progress along the route, or a detailed profile (Profile Plus) that helps them locate themselves based on changes in the grade in relation to features along the route. The preference was overwhelmingly for the detailed profile (refer to Figure 6, Elevation Information).

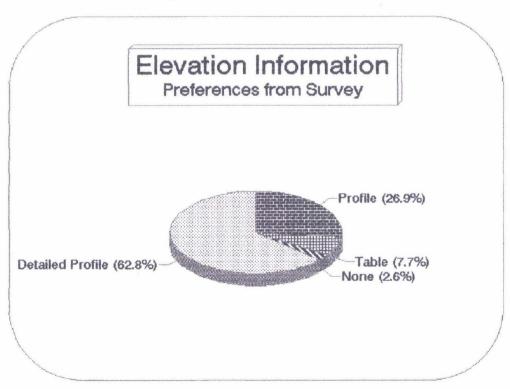


Figure 6, Elevation Information

e) Route Classification or Rating.

Some writers rate each route or describe each one in terms of how difficult it will be for an "average" mountain biker to ride it. This can be subjective; for example, one rider may consider himself an expert, but not have as much expertise and ability as another person who considers herself to be only an advanced rider. It does, however, provide a quick indication of how difficult a route will be. Respondents were given a choice of having no rating (None), just a listing of the Type Of Route (for example whether it's a road or single track trail, which implies some level of difficulty or challenge), an Overall Difficulty rating, or a rating that specifically mentions both Physical and Technical difficulty. The latter two ratings were close, but people preferred the physical and technical rating (refer to Figure 7, Difficulty Rating of Route.)

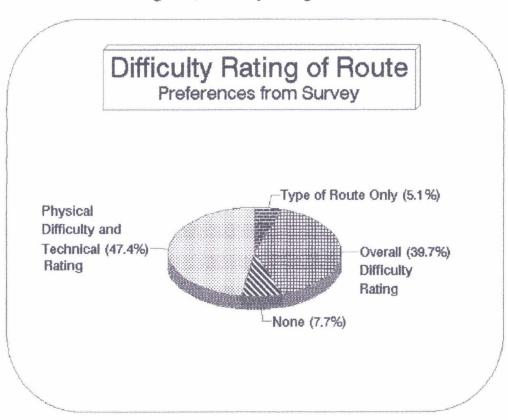


Figure 7, Difficulty Rating of Route

Few of the guides that were reviewed provided both the rating and the rationale behind the rating. The routes for this proposed guide will be rated for both physical and technical difficulty, and the rating will be included in the description and on the maps. Difficulty levels are based on trail gradients, alignment, clearing widths, tread conditions, gain or loss of elevation, availability of water, and the amount and kind of natural barriers that must be crossed. The degree of challenge a trail presents to an average user's physical ability and technical skill is what the ratings are based on. Typical terms used by the Forest

Service are Easiest, More Difficult and Most Difficult (FSH 2309.18). These ratings will be used in the guide and are described as follows:

- o Easiest A trail requiring limited skill, with little challenge to travel.
- o More Difficult A trail requiring some skill, with moderate challenge to travel.
- o Most Difficult A trail requiring high degree of skill, with high amount of challenge to travel.

f) Overall Format for the Guide.

Two questions about format were asked: 1. Do you have a preference to using a map or book format?, and 2. What size do you find most usable and convenient? The options given for this second question were, a) Book format, b) Brochure size map or booklet, c) Pocket size map, or d) Large folded map. The responses showed that the majority of people preferred a map (refer to Figure 8, Format of Route Guide, for a display of the responses).

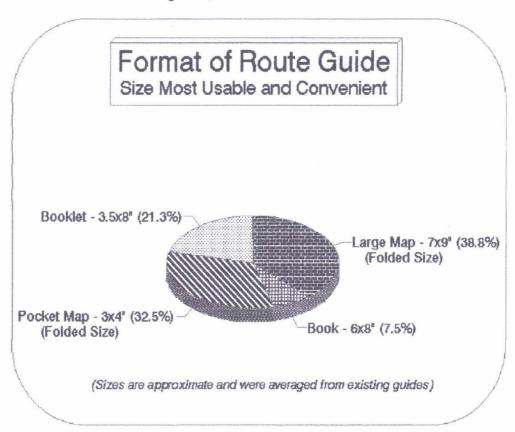


Figure 8, Format of Route Guide

After looking at some of the responses, it seemed that some confusion arose between the two different questions. In numerous cases people responded that they preferred, "a book or booklet that has route descriptions and individual maps for each route", and then they answered the next question that they found the "pocket size" or "large folded" maps most usable and convenient. It was assumed at the start of the project that the format people would prefer was also the one that they found to be the most usable and

convenient. That is either not the case for some people, or they were slightly confused with the questions.

g) Other Features

One of the questions asked what other features the bikers would like to see in the guide. The list that was generated from their responses (see Figure 9) was very similar to one from a survey of 91 mountain bikers in California in 1989 and 1990 (Lloyd, 1990). Ethics and proper use information were the most requested items. The opportunity to include any or all of these items will be dependent on the final format of the guide. All could be included in a detailed book, but only selected items would be on a map.

Figure 9, Items to be Included in a Guide

Ethics and proper use information **Pictures** Agency listing Safety Information Private/Public land access concerns IMBA Code/Tread Lightly information Listing of allowed trail users Landmarks Equipment list Special problems /Exceptions to normal rules Intersecting routes for support vehicles Table for detailed milepoints Use periods (when dry or not damaged) Water usage/availability Listing of special events Maintenance schedule of the routes (trails) Hazards and alternate routes Emergency information/phone numbers and escape routes Descriptions coordinated with trail and road signs (numbers) Wilderness Boundaries

E. Other Format Considerations.

1. Format for Forest Service and Bureau of Land Management Use.

Early in the project, format was discussed with agency representatives. The Routt National Forest uses a loose-leaf format (known as the Recreational Opportunity Guide or ROG) to distribute much of the available recreation information to the public. A forest visitor can request information about a general recreation activity such as hiking, and can also get specific information about a particular trail. The Bureau of Land Management can also provide that type of information. It was decided that the information from this project should be formatted to fit this existing system. In addition, it was suggested that the information be retrievable from computer, including the maps, so that it could eventually be put into an interactive video display system and into a geographical information system. It was determined that almost all of the preferences of the users would fit in the ROG format.

2. Format for Rural Development.

Since this project was structured to help with rural development for the Town of Kremmling it was important to find out what format would work best from the Town's standpoint. A committee was formed to determine this. Members included representatives from the Chamber of Commerce, the Bureau of Land Management, the Forest Service, Grand County, and a county-wide planning organization (the Upper Colorado River Alliance). While the original concept for the project (solely that of the author) was to produce a booklet that could be sold, the coordination with these other local groups reflected a different outcome. The preferred format is one that would be fairly simple and easy to use, would be like a shelf brochure that folds out to a map of the entire area (western part of Grand County), and would be available to the public at minimal charge. While the actual base map could vary somewhat, the idea that the guide be inexpensive was key to the project. It was thought that a guide that didn't cost much would get wider distribution and thus have the potential to attract more people. This map format would be suitable for those who desire less detail for any individual route. It was determined that most of the preferences for the type and content of a guide, as identified in the survey, could be accommodated with this format.

3. Final Format for the Guide.

Based on all the input, two different formats were selected. As a result, the project was divided into two phases. The first phase would produce an in-house guide in the ROG format for use by the management agencies. Each route will have a 1-2 page detailed description and route profile, and a computer generated map. As a person comes into the Forest Service, BLM or Chamber office they can review the guide and then get a copy of the information for the particular route they are interested in. This format will be preferred by those who want the most detail possible for individual routes. This phase was the primary emphasis for completion for this Clemson Field Project.

The second phase will produce a product that will benefit the local economy, primarily through promoting the area to recreationists from other communities. The format will be a large map of the area that displays all routes on one side. Abbreviated route descriptions and detailed route profiles will be included on the flipside of the map. The information for this product will be generated through the first phase. It will require re-editing the descriptions and adapting the individual maps to the larger base map format. In addition, it will require finding partners to finance the publication of the map. A target date of April 1, 1994 has been selected to have a finished product available for distribution.

F. Write Descriptions and Develop Maps.

1. Descriptions

Based on the User Preference Survey, there is a strong desire to have detailed descriptions for the routes. The information for each route was structured so that it was easy to read. Users can quickly find what they are looking for because the descriptions are divided into sections. The sections were as follows:

Location
Length and Type
Access
Route Direction and Conditions
Scenery and Highlights
Difficulty
Hazards
Services
Land Status
Maps
Sources of Additional Information

Some of the same information may be repeated if it is important to make sure the reader sees it. For example, the Route Direction and Condition section may describe a hazardous stream crossing even though it would obviously be discussed under the Hazard section also. It could even be mentioned under Difficulty if it would likely affect the difficulty of the route.

A route profile is included as part of each route description. When developing the map for the routes, each half-mile or mile point along the route was measured with a planimeter. Reference points, such as cattleguards and creek crossings, were also measured. The mileage points were put into a spreadsheet format using Quatro Pro SE software on a personal computer. Within Quatro Pro the data was converted to a line graph that displayed the route in a cross-section profile. The graph was then formatted and moved to an annotator program where it could be labeled with specific reference notations (e.g. cattleguards and creek crossings). The completed graph was then converted to a text file and was imported into a drawing program in Geoworks word processing program. After sizing it down, it was combined with the written description to be printed as a combined product.

It is estimated that each description, including collecting the data and creating each profile, took a minimum of one day per route.

2. Maps

Making the maps for each route was very time consuming. Each route was delineated on a topographic base map. In some cases it was necessary to use aerial photos or orthophotoquads to improve

the accuracy of delineation. An overlay was made for each route that included streams, roads, land boundaries and other key features as well as the route itself. The overlay was registered with state plane coordinates and then all information was digitized into Autocad. The road symbol (double lines), mileage markers, spot elevations and special symbols were added. The drawing was labeled and a legend created to make it easier to read. After checks for accuracy, the map was ready to be printed to be combined with the description. On the average, each map took about 2-3 days to complete. Appendix G includes examples of the completed descriptions and maps for the project.

G. Project Evaluation

An important part of the project is to review and evaluate how it progressed.

1. Were the project goal and objectives met?

Goal: Complete a mountain bike guide for the Kremmling Area - A guide that includes 16 routes, mostly in western Grand County, with seven routes starting in or near the Town of Kremmling, has been developed and distributed to the Kremmling Area Chamber of Commerce and numerous Forest Service and Bureau of Land Management offices.

Objective #1: Provide information to the increasing number of users in the area - Information on routes that range in difficulty from easiest to most difficult is available to mountain bikers. Routes have been selected that are relatively close to Steamboat Springs, Winter Park and Dillon /Silverthorne in Summit County. The guide is formatted to meet the user preferences based on a preference survey.

Objective #2: Assists land management agencies in directing use to appropriate areas - Over 50 possible routes were considered. The 16 routes that were selected are those that avoid existing high use areas and which have minimal impacts on natural resources.

Objective #3: Helps the Kremmling Economic Development Committee meet it's objective of attracting more visitors to the area - Even though the guide is only in the recreational Opportunity Guide format and has not had wide distribution, mountain bike riders are already coming to the area just because they have heard about the project.

The overall goal and objectives have been met. The project and resulting product have been of interest to many people and can be deemed a big success.

2. Were the personal goals met?

The five personal goals have also been met.

- (1) The product will be of great use to the Middle Park Ranger District.
- (2) This project facilitated learning computer programs including Autocad, Geoworks, Quatro Pro, and even how to download from the Data General to a personal computer. These skills will be very beneficial in the future, and will make it much easier to adapt to the Geographical Information System and District Production Database that will be coming this year with "Project 615".
- (3) It was valuable to become more involved with the community. The Economic Development Committee and other local planning groups endorsed the project. Having joined the EDC, my assistance has been solicited for other local projects. As a result of this project I also joined the local Rotary Club. They help with raising money for the guide and they get my assistance on service projects.
- (4) Many topics discussed at the Clemson session were further explored during this project. These include both written and oral communication, economic development, partnerships, determining customer preferences, utilizing information sources (SCORP, FS INFO), and planning for tourism.
- (5) The project was very complete for the first phase. Approximately 640 hours have been put in on the project and writing the paper (154 of those hours by other individuals assisting with typing, map development, and writing descriptions). Well over half of the total hours have been volunteered. The second phase is ongoing and will be completed as the rest of the committees finish their work. A minimum of another 80 hours are expected to be needed for fundraising and to reformat maps and descriptions for the published guide.

3. Changes in the Project.

A project of this duration was expected to change as it progressed. The main change was the separation into two phases. It was necessary to produce the guide in two formats. The map format was going to take much longer, and required more external involvement. While this added a lot more work to the project, it will make it much more successful and will further add to meeting the Kremmling EDC's objective of attracting more visitors.

4. Problems Encountered.

Many problems were encountered during the project. In some cases these caused only minor delays, but in others a different process had to be tried in order to avoid significant delays.

a. Coordination - This was a very time consuming process. Because of the need to deal with such a diverse group of people, both in and out of state, communication was difficult. It would sometimes take

three or four calls to contact somebody in another agency or business. Coordination with working committees was important but not always very successful. Although being willing to work on the project at the start, many people just could not find the time to complete their tasks in a timely manner. In the case of the Bureau of Land Management, the project received strong support at the beginning, but little support for task accomplishment and overall approval of routes. The situation with the Colorado State Land Board was just the opposite - negative at the beginning, but somewhat supportive at the end.

b. Literature Review - This was started the first month of the project and finished the last. Problems were encountered trying to retrieve references from FS INFO. Being unfamiliar with the system and not quickly following through when problems were encountered, led to big delays. In the end the system worked well and should be of help with future district projects. In searching for other references the local library was too small to provide much assistance, and time and budget constraints prevented use of other libraries or inter-library loan services.

c. Computer Problems (and Learning Curve).

Early in the project it was evident that the resulting product was going to be heavily tied to using a computer. Autocad, spreadsheet and word processing programs on the PC were foreign to me. Many problems with software were encountered both during the project and writing the paper. Some of these problems were due to poor documentation from the parent company, others were based on trying to do something the programs weren't well suited for. Having had very little prior "PC experience", a large problem was merely having to deal with the "learning curve" with three different programs.

Conclusion and Recomendations

A. Conclusion

This project has resulted in development of a guide - a guide that displays mountain bike routes in western Grand County, Colorado, with Kremmling as the focal point. This guide will help the Town of Kremmling attract recreational users to the area. While being a very long and time-consuming project, the end products will be valuable for the public. The Town of Kremmling, the Forest Service and the Bureau of Land Management will benefit from having the information to distribute.

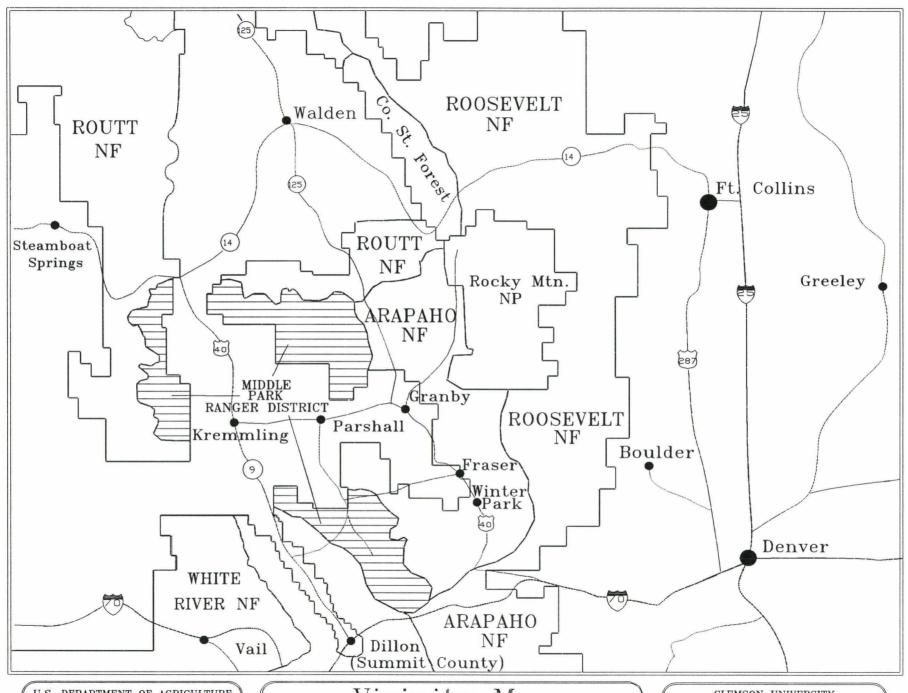
B. Recommendations

- 1. Follow through on completion of the second phase product Despite the fact that the second phase goes beyond the scope of this project, it is recommended that it be completed. Two important steps remain:
- a) Publish a map version of the guide As discussed in the results section, the guide should actually be formatted two different ways. The format that is displayed in Appendix G is complete for the Recreational Opportunity Guide. The Chamber of Commerce, Forest Service and Bureau of Land Management offices have a set of route descriptions and maps to make copies of, when requested. The second phase would involve printing in a totally different format. A large scale map is needed to display the entire Kremmling area (the western half of Grand County) which is 30 miles east to west, and 55 miles north to south. At a scale of 1:110,000 the map would be about two foot by three foot.. Each of the routes could be displayed on one side of the map along with a number to reference it to a legend. A reduced version of the route descriptions, including the route profile, could be placed on the back of the map. Other land use ethic and recreational information could be listed in the margins and shown on the map.
- b) Locate funding to pay for publishing Some partners have already donated money or products valued at \$2,700. Follow through on raffling the bicycle to get as much of the \$1,200 value as possible. Estimates to produce the map range from \$8,000 to \$15,000 depending on the base map and the amount of work the printing company must do. After collecting additional information about costs, a decision would be made as to what the final base map would look like. At that time a final cost estimate can be made. In the meantime, grants and partnerships should be solicited. Below is a list of potential partners:

American Discovery Trail, American Outdoor Produce, Bike Line, Bike Peddler Bike Products, Boulder Bicycles, Colorado Mountain Bike Magazine, Golden Cyclesmith, Descente America, Latitude 40° Inc., LT Helmets, Madden USA, NORBA News, O.R.C.A Boulder, Otero Cyclery, Yampitika Outdoor Interpretative Association, Adventure Cycling, Pearl Izumi, Share The Earth, Grand Cycle Station.

- 2. Promote the products (and the area) Just by virtue of holding the raffle, the guide will get some advertisement. Other activities have also been proposed that would both advertise the guide and attract more visitors to the Kremmling area. These include holding some sort of mountain bike event a tour or a race, or working with tour groups to include this area in some of their routes.
- 3. This recommendation relates to the above topic. During meetings with various groups around the county, there was some resistance to increasing the recreation use of the area by a select few individuals. When this point was brought up to the Economic Development Committee, the president felt that the community had already been asked for input about proposed EDC projects. However, when considering events with potentially large numbers of visitors the issue should be raised again. It's recommended that the EDC write an article soliciting input or hold a meeting to invite further comments.
- 4. Monitor While it's beyond the scope of this project, it would be beneficial to monitor the success of the project. This could serve as a future project for a Clemson recreation student or someone involved with rural development. It will be recommended to the Chamber of Commerce that the director try to monitor effectiveness of the guide. The Chamber occasionally tracks the number of visitors and the activities they participate in. Visitors already stop by the office and ask about mountain biking routes in the area. In the future it will be valuable to ask visitors who come mountain biking if they heard about the area through the route guide. Another idea is for the Chamber to include a postcard with each map distributed, and ask the bicyclist to mail it or drop it by the Chamber if they ride any of the listed routes. The card will ask the mountain bikers what route was ridden and what they thought of it.

Appendix A - Vicinity Map (North-central Colorado)



U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE UAS

R-2ROCKY MOUNTAIN Vicinity Map (North-central Colorado)

CLEMSON UNIVERSITY RECREATION SHORTCOURSE HOFFHEINS July 1994 Appendix B - Literature Cited

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Appendix C - Literature Review: Route Maps and Guides

Literature Review - Route Maps and Guides

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Moab East. (Utah) Mountain Biking and Recreation Map - Latitude 40*.

Colorado Rocky Mountain Front Range Travel and Recreation Map.

Bike Map-Durango Area, Southwest CO Mountain Bike Routes - Trails Illustrated.

Vail and Eagle Valley (CO) Mountain Biking and Recreation - Latitude 40*.

Appendix D - EDC Action Plan

KREMMLING ECONOMIC DEVELOPMENT COMMITTEE

ACTION PLAN

KREMMLING'S VISION FOR THE FUTURE

Our vision for Kremmling's future is to maintain the wholesome quality of life of which the community is proud, while attracting and sustaining a diverse business/economic sector. We wish to continue to attract those families whose ideal is to live in a family-oriented community which is environmentally healthy and provides strong educational and health care systems. All of these factors contribute to maintaining a strong infrastructure. Our desire is to build up our local businesses to better serve the residents of West Grand County and to attract businesses/manufacturers to help provide much needed employment to the area. Kremmling has alot to offer both residents and visitors, but our greatest task is to attract and provide for a prosperous business community. Ten years from now, we wish to see Kremmling with a stable economy, a balanced healthcare and educational system, and more housing to satisfy the needs of buyers and renters. Change is inevitable; we choose to direct that change in a positive way, to assist us in achieving our goals. As has been demonstrated by the members of the Economic Development Committee and other local residents, the committment and hard work is already paying off as the community works towards making their vision a reality.

I. INTRODUCTION/PURPOSE

The Kremmling Economic Development Committee (EDC) was formed in November of 1991 in an effort to decrease the economic impact of the closure of the Louisiana Pacific waferboard plant, a major employer for the area. The impact of losing 100 mill jobs and approximately 50-100 related logging jobs in a small, rural community of 1,166 can be severe. The purpose of the EDC is to encourage focused, sustainable and diversified business development which is also environmentally sound. The Committee is a combined effort of the Chamber of Commerce, Town of Kremmling, government agencies and interested citizens. (See Appendix A)

II. The following goals have been identified by the Committee:

- 1. To encourage focused and sustainable business/industry development.
- To encourage diversified business/industry by development and implementation of a multisector economic strategy that would provide cohesion between the primary sectors, including but not limited to ranching, timber products, recreation, services and education. In diversity there is stability.
- 3. To establish Community standards of environmental quality.
- 4. To establish and maintain broad Community acceptance of a long-term economic strategy.

Objectives to be targeted are:

- 1. Provide job opportunities for existing and future workforce.
- 2. Target businesses that would benefit from Kremmling's attributes.
- Support local existing businesses and economic sectors.
- Generate community representation and involvement from private, public and civic sectors.

- Build a positive community attitude.
- Build a positive community image (physical appearance of the town).
- Assure a full spectrum of services
- 8. Increase recreational opportunities for visitors and residents.
- Develop a screening process for potential industry to insure high environmental quality.

III. PROJECT IDENTIFICATION

The Kremmling community has aggressively pursued a variety of projects to create a network of diversification to achieve our primary goal - economic stability. The attributes of the community, of which there are many, support our commitment that Kremmling has the potential for a bright future. The EDC projects are as follows:

A. Business Brochure - COMPLETED

This brochure is being developed to provide information primarily for prospective businesses and secondarily for families interested in relocating to the Kremmling area.

RESPONSIBLE PARTIES: EDC, Chamber of Commerce

COST: \$ 7,800

FUNDING: Chamber of Commerce & Kremmling Economic Development Committee = \$2800,

U.S. Forest Service = \$5000.

DATE: Completed by July 1992 (Project was completed 7/92) EXPENDITURES TO DATE: Community = \$2800 F.S. = \$5000

B. Feasibility Study for Determining Marketability of Local Wood Resources - COMPLET-ED

A grant proposal was written requesting funds for hiring a consultant to explore the marketing opportunities for wood resources available in this working area. With the closure of the LP waferboard mill, the community is anxious to attract a business that would process available wood resources. The wood processing market has become so diversified and specialized, that it is felt that a consultant could help Kremmling sort out what wood products could be processed from the specific species, volume, and quality wood that is available in this area and provide us with specific companies to contact as prospective businesses.

Results of feasibility plan indicated 3 different wood resource manufacturing plants feasible: furniture, end-glued products, and cut-stock. A fourth, wood pellet manufacturing, is offered, but considering a wood pellet operation is to be starting up in Walden, Colorado, which is 65 miles away. This option has dropped to a lower possibility because of the competition of the Walden site. As per the contract, the consultant identified 9 different manufacturers, who are currently looking to relocate and indicated strong interest in Kremmling. All 3 of these processes could utilize wood from this geographic area, however these operations have been accustomed to and it is considered economical to haul wood resources into this area from even out-of-state. This is to the benefit of the community since the Routt National Forest is currently in Forest Plan Revision and volumes of available wood are not guaranteed.

12-1-93: Bill Koelm, past town manager, has successfully recruited a wood truss manufacturer to our area. This is an established company which has relocated from Southern California. They

are currently leasing a building 10 miles east of Kremmling, with "tentative" plans, when they have become more established in this area, to perhaps build in Kremmling.

RESPONSIBLE PARTIES: Town of Kremmling, EDC, U.S. Forest Service

COST: \$55,956

FUNDING: Community of Kremmling contributed \$10,956 in-kind services, plus town manager salary for assisting on recruiting consultant and administering the consultant contract.

DATE: Completed, consultant gave final presentation to the community 5-25-93.

EXPENDITURES TO DATE: Community = \$10,956, F.S. = \$45,000

Grant for \$45,000 received from Forest Service 10-92 RFP Bid proposals mailed 11-92, deadline for submittal 12-11-92 Consultant proposals evaluated and selection made by 1-1-93. Project completed 5-25-93

C. Business Incubator

This facility will help new and fledgling businesses by providing shared facilities and equipment, support services and professional advice that may not otherwise be obtained. While national statistics show that over 80% of new business ventures fail within the first 5 years of operation, businesses nurtured in an incubator have a survival rate of over 90%. In May 92, an EDC member was recently sponsored by the Town of Kremmling, Mountain Parks Bank and the Kremmling Chamber of Commerce to attend the National Business Incubator Assoc. workshop in Texas for one week (tuition was \$1000). The attendee received extremely valuable information and contacts. Same indiviual attended workshop again in May 93 using personal business funds (\$1000).

Survey completed 9-92, approximately 27 respondents, 200 volunteer hours.

RESPONSIBLE PARTIES: Town of Kremmling, EDC, Chamber of Commerce, U.S. Forest Service

COST: Community of Kremmling will contribute \$10,000, have already contributed in-kind services & cash contributions totalling \$3000. Training for EDC member = \$1000, Survey & advertising \$2000. F.S. contribution = \$15,000 to be used to contract with a 1/2 time consultant for 6 mths, responsibility to follow established plan of work, obtain funding, and "open doors".

In-kind services 8-1-93 to date: committee members = 480 hrs = \$5440. Many of these hours attributed to preparation for "How to Start and Grow Your Own Business" conference 12-2-93. The local high school FBLA and teacher sponsor are also assisting as a partner. Volunteer hours = 180 hrs = \$720.

FUNDING: Town of Kremmling, Chamber of Commerce, Grand County Marketing Association, Mountain Parks Bank, U.S. Forest Service,

DATE: Marketing consultant contracted to begin plan of work 6-93.

EXPENDITURES TO DATE: \$8600

D. Scenic Byway Designation

Recomendation received from Colorado State Scenic Byway Commission in April 1993, for designation of the Trough Road which parallels the upper Colorado River as a backcountry scenic byway entitled "Colorado River Headwaters Scenic Byway." The route travels the length of Grand County and should increase visitation to all communities it passes through, including Kremmling.

Public mailing of 300 letters in 12-92 for reponses. Presentations were made to town boards in each community in Grand County adjacent to the byway route in Jan 1993 to obtain support. Support was given from all communities.

Colorado State Dept of Transportation final approval 9-19-93.

Management Plan development currently on-going.

RESPONSIBLE PARTIES: EDC, Chamber of Commerce, Town of Kremmling, Grand County, Bureau of Land Management, National Park Service, Forest Service, State Division of Wildlife, State Scenic Byway Commission, State Dept of Transportation, State Highway Dept, Grand County Road and Bridge, Grand County Tourism Board, Chamber of Commerces and Towns of Grand Lake, Granby, Hot Sulphur Springs, and Kremmling,

COST: To be determined

FUNDING: Each of the responsible parties listed above have projects funded that will be a part of the byway enhancement, i.e. road improvement, fishing access points, interpretive centers, campgrounds.

DATE: Completed in 1993. Preliminary proposal has been prepared and public comments are being reviewed. The final proposal will be submitted to the State of Colorado in March 1993. EXPENDITURES TO DATE: Community = \$2400 BLM = \$3000 *

E. Assisted Living Center

In January 1992, the idea for an Assisted Living Center in Kremmling began to formulate. The State Dept of Local Affairs strongly supported the idea because northern Colorado did not have senior citizen living center of this nature. A steering committee was formed in 3-92. Their determination and hardwork has paid off. Site chosen Oct 1992, lease for \$1.00 / year from West Grand School District. Contractor bid opening 6-14-93. Ground breaking ceremony 6-19-93. The committee completed all these accomplishments in just 15 mths.

A Community Development Block Grant was received = \$400,000, a low interest loan was obtained through CHAFFE (Colorado Housing & Finance Authority = \$525,000, grant from Northwest Council of Governments (NWCOG) = \$5000 to hire a business consultant, 300 hrs. of Community Development Staff time from NWCOG, the architectural firm agreed to an 8% of construction costs contingency fee when/if the center is built.

Responsible Parties: Town of Kremmling, EDC, Kremmling Memorial Hospital, Assisted Living Committee Steering Committee, Northwest Council of Governments, Colorado State Dept of Local Affairs, Colorado State Housing & Finance Authority, West Grand School District.

Cost: \$1.1 million for 24-unit project (At recent bid opening, this cost estimate, which is 9 mths old, is outdated. Lowest bid was \$300,000 over this amount. Town Board, architect, & contractor will be meeting soon to negotiate.

Funding: Grants and low interest loan

Date: Opening date planned for July 4, 1994.

Expenditures to Date: Community = \$7880 (985 hrs by steering committee), NWCOG = \$5000 + 300 hrs by staff, Town = *

F. Log Cabin Heritage Museum

Historical structures have been donated to the Grand County Historical Association for development of a museum in Kremmling to further preserve Grand County history. The primary theme will be ranching history of the area. Such a museum will tie in well with the increased travel and tourism to the area.

Received State Historical Register designation 3-93.

To obtain land, committee signed a personal note to carry loan to guarantee ownership of land. Committee continues with benefit fund raisers.

Responsible parties: Grand County Heritage Association (there is a sub-committee of GCHA located in Kremmling for this project) & EDC

Cost: \$120,000 (to open doors)

Funding: Town of Kremmling, Grand County, private donations, Colorado Historical Society

grant

Date: Contract signed June, 1992 for purchase of 5 lots, development in 2 years

Expenditures to Date: Town of Kremmling = \$2500 County = \$2500 Community = \$5000 Donations = \$15,000, \$5000 grant from Colorado Historical Society for rehab of livery barn, barn and 1 lot donated by local family, 4 other historical buildings also donated, to be moved onto the site.

G. Police Department/Town Maintenance Facility - COMPLETED

A new facility was needed in order to maintain Kremmling's infrastructure system to include water, sanitation, maintenance and 24-hour police department. The structure was built on town property.

Responsible Party: Town of Kremmling

Cost: \$223,224

Funding: Grant receipt, General Fund of town = \$60,000

Date: Project completed 10-92 (on time) Expenditures to Date: \$223,224 (total cost)

H. Motel Facility

Recognizing that Kremmling does not have sufficient overnight accommodations, the town is working toward an additional modern motel.

The town first gave local interests ample time to determine if they were interested in investing. When no follow-thru, town contracted with a motel consultant in Denver to search for outside investor, likely in a chain ownership.

Responsible Party: Individual or chain corporation

Cost: \$750,000 - \$1.2 million, 40-50 unit

Funding: Private

Date: As of this date, we do not have an investor identified.

I. Railroad Depot

Kremmling previously had an Amtrak train stop. Representatives from the EDC contacted and coordinated with Summit County and Steamboat ski resorts to propose to Amtrak re-opening the depot. As of 11/92, Wilderness Society offered to do the research work to gather data from ski resorts and funding possibilities. 1/94 Amtrak is looking at closing Amtrak stations, this project has been put on hold.

Responsible party: Town of Kremmling

Cost: \$60,000

Funding: To be determined

Date: Pending

Expenditures to Date: Community = \$240

J. Wolford Mountain Reservoir

This is a project to be constructed on Muddy Creek north of Kremmling primarily for water storage. The area will also be used for boating, fishing and camping recreation. Construction work began 9/93.

Peak of employment during summer months estimated to be at 170-200 persons.

Responsible party: Colorado River Water Conservation District

EDC, BLM & CO State Parks involved with recreational development.

Cost: \$43,000,000

Funding: Same as responsible party

Date: Construction to begin Fall 1993, Contract awarded to D.H. Blattner, Minnesota, Dam

project completed and reservoir full 1996.

K. Upper Colorado River Alliance

This has been primarily an effort by the BLM to develop an integrated management plan for recreation, wildlife, cultural and vegetative resources along 95 miles of the Colorado River from east Grand County to Glenwood Springs. To date the BLM has met with the communities involved & adjacent landowners to identify needs, scoping, & to work on building partnerships.

Emphasis as of 6-93 has been on Gore Canyon River Access, just outside Kremmling, to find access to Colorado River for kayakers. Gore Canyon has become a very popular kayaking challenge with Class 5 & 6 rapids. Negotiating with private and railroad ownership to provide public access.

Monthly meetings between agencies and communities, trails network being established.

Responsible: Bureau of Land Management, Grand and Eagle Counties, Division of Wildlife, U.S.

Forest Service, EDC Cost: To be determined

Funding: Federal funds, Town of Kremmling, Grand County, non-profit organization grant

applications

Date: 2-year project, completion 1994, Expenditures to Date: BLM = \$30,000

L. Town of Kremmling Master Plan - COMPLETED

A revision of the town's master plan was necessary to include new economic development projects and bring plans for the Town up to a current time table. Updated master plan was needed to assist town in applying for grant funds and to document the direction of the town's future. Private consultant was hired, contract administered by the town manager.

Responsible party: Town of Kremmling

Cost: \$15,450

Funding: Grant received, general fund

Date: Completed and approved 11-92

Expenditures to Date: \$15,450

M. Rehabilitation of Town Square

This project will enhance the downtown area, of which the focal point is the town square. This will encourage travelers to stop and spend time in Kremmling and perhaps visit our local businesses.

Construction will begin 6-22-93 with installation of 12 antique street lights. Ice rink rehab will begin Fall 1993. Corner treatments and benches to be installed Spring 1994.

Responsible party: Town of Kremmling, in-kind labor from community

Cost: \$25,000

Funding: Design completed directly by State Dept. of Local Affairs and the University of Colorado. Antique lighting \$12,700 provided by Lottery funds, ice rink = \$6000 of town funds, \$6000

- \$8000 town funds for corner treatments and benches.

Date: Design completed 1992. Construction to begin 6-93.

Expenditures to Date: State & U of C = \$11,100

N. Rehabilitation of Highway 40 Business Section

In addition to the Town Square Master Plan, the community, in working with a consultant, completed a Master Plan for enhancement of the business section of Kremmling which parallels Highway 40. This plan was designed to compliment the town square.

At this time, this project has been put on hold pending the Colorado Dept of Transportation development of procedure to fund projects covered by the Intermodle Surface Transportation Act (Federal Highway Trans. Act).

Responsible party: Town of Kremmling, in-kind labor from community

Cost: \$25,000

Funding: \$15,000 received from Northwest Council of Governments, Energy Impact Grant for

the Master Plan.

Date: To be determined

Expenditures to Date: \$15,000

O. "Build a Generation"

"Build a Generation" is a public-private initiative to assist selected communities in Colorado in designing and implementing a twenty-year commitment to reduce crime, delinquency and related problems. Kremmling, which is one of four communities that was selected by the Colorado Division of Criminal Justice to participate in this project, is committed to lowering the crime rate in all age groups. After an extensive survey, it was found that the population of Kremmling deemed that one of the major problems of juvenile crime was stemming from the households' economic strife.

Responsible party: Town of Kremmling, West Grand School District, Grand County Commissioners, Community Churches, Grand County Social Services, CSU Extension Services, Forest Service, Grand County Advocates, Colorado Division of Criminal Justice

Cost:

Funding: 2 workshops were funded by the Colorado Div of Criminal Justice for 5 trainees from the committe

Date: Ongoing

Expenditures to Date:

P. Job Corps Civilian Conservation Center

The community of Kremmling and the Middle Park Ranger District are currently competing for the location of a Job Corps Center near Kremmling. The Forest Service Regional Office submitted applications for 3 sites in Region 2. Dept of Labor sent out 2 representatives to inspect Kremmling's site and visit with community members. Dept of Labor currently working on reducing the list of 96 applicants to 20. 10 of the 20 sites will be funded.

12-6-93 Received notice that Kremmling was not selected for the list of 20 sites.

Q. Grand County Aviation Master Plan

The purpose of this plan is to study existing airport facilities in Grand County and determine what would be feasible to upgrade them to increase air traffic, both passenger and freight. The Kremmling airport is under joint ownership by Grand County and Town of Kremmling.

Determination was made for overlay of runways at Kremmling airport. Kremmling pursued additional support from FAA for new hangers.

The construction of 5 hangers will begin 7-93, cost \$45,000, funding provided by Colorado Division of Aeronautics. Load bearing overlay will be installed over all the airport pavements = \$880,000 (90% funded by FAA, 5% by State, 2.5% by town, 2.5% by county.

Responsible party: Grand County, Town of Kremmling, FAA

Cost: \$73,000

Funding: Grant from Federal Aviation Administration

Date: County Commissioners will adopt it after FAA approval (July 1993). Work to begin 7-93.

Expenditures to Date: County = \$2400

R. New Business/Manufacturing

The EDC is aggressively recruiting appropriate new businesses and light industry to help diversify the area's economy. State Dept. of Local Affairs, whose responsibility it is to attract businesses to Colorado, has met with community representatives and is up-to-date on Kremmling's attributes. During 1992 seven closed businesses were purchased and new businesses were opened.

Cost: Upon completion of Kremmling brochure, Kremmling will be getting into computer database administered by Dept. of Local Affairs for annual fee of \$400.

Funding: Town of Kremmling, Chamber of Commerce

Date: Ongoing at this time Expenditures to Date: None

S. Regional Information Center

Kremmling has been classified by the Colorado Department of Highways as a key access point into major recreation areas and has been selected for the site of a Regional Information Center. Just under 1 million vehicles pass through Kremmling annually.

Responsible party: Town of Kremmling, EDC, Grand County, State of Colorado, Bureau of Land Management, U.S. Forest Service

Cost: \$800,000

Funding: Grand application, general fund, county and state funding

Date: Included in Five-year Transportation Master Plan for the County, perhaps by 1994. County

has road and bridge added for 1993. Expenditures to Date: State = \$1500

T. Kremmling Recreation Complex - Property Purchase & Improvement

The town of Kremmling and Grand County currently leases from the Colorado State Land Board property upon which is located 3 ball diamonds which are used by 5 local baseball/softball leagues, with users ranging in age from 6 yrs to adults. Under a cooperative effort, the town and Grand County would like to purchase 15 acres and invest in improving and upgrading the facility into a multi-purpose recreation complex to accommodate the following:

3 improved ballfields permanent hockey rink archery range volleyball court golf driving range horseshoe pit picnic area

Responsible party: Town of Kremmling and Grand County

Cost: \$70,000

Funding: Grant application was made to Land and Water Conservation Fund in 1992 and 1993.

Grant was denied both years. Application being re-submitted for FY 94.

Date: Summer 1995

Expenditures to Date: Community = \$1200

U. Business Seminars/Training

A continuing education series has been underway providing classes/seminars in financial management, hospitality, economic development and business incubator information. For example, a local business owner provided, at a very reasonable cost, a seminar for small business owners on financial/business plans. The state provided a seminar called "Colorado Loves Company", a session which promotes "hospitality" training for local business employees. Our chamber director received a scholarship from the Heartland Training Center to attend a Rural Diversification conference in Jackson Hole, Wyoming spring 1992, A local business owner acted as liasion to bring a nationally known financial advisor to conduct a small business financial seminar for small business owners. Northwest COG is looking for participation from State Universities to bring graduate students into local businesses for financial advisement Spring 1993.

Responsible party: Town of Kremmling, EDC

Cost: To date \$2600

Funding: Chamber of Commerce, Town of Kremmling, scholarships, private donations, person-

al payment

Date: Currently ongoing Expenditures to Date: \$2600

V. Trail Systems Network

There are trail networks in the Kremmling area and a coordinated effort is needed to combine them to include hiking, snowmobile, mountain biking, horse and cross country ski trails. The

network area will include Wolford Mountain Reservoir, East Grand County, Steamboat Springs and Summit County. The EDC has been working with state universities to provide assistance in trail planning and development. Wilderness Society will help seek funding.

Responsible parties: BLM, EDC, Chamber of Commerce, Forest Service, Wilderness Society, Colorado River Water Conservation District

Cost: Undetermined, still in early planning stages.

Funding: Federal funding and grant proposals, in-kind labor from community, conceptual design by University of Colorado students

Date: Design completed by U of C 4-93.

Expenditures to Date: Community = \$800, BLM \$8000, Colorado River Conservation District = \$340,000 purchased 360 acres and grazing rights for wildlife mitigation to replace habitat lost to Wolford Dam reservoir. Once the habitat has been re-established, it will be re-opened to public access for hunting, fishing, and trail development linking the reservoir with Kremmling.

W. Mountain Bike Trail Guide for West Grand County

Don Hoffheins, Middle Park RD, is working on developing a trail guide for mountain bike users. He is coordinating with other trail groups. A search for partners is being conducted to help finance the publishing of the guide.

X. Williams Fork Recreational Development

NOTE: Funding for this project is not available at this time. It has been shelved until at least 1997.

Improvements of existing facilities and construction of a new campground, trails and interpretive sites are proposed. The visitor experience will be enhanced and new opportunities created, which will be an invitation to users to extend their stay and perhaps visit surrounding areas including the Kremmling area.

Proposal has been accepted by the Regional Office. Projects will occur each year for next 4-5 years (as long as funding remains available). Expansion of barrier-free facilities a strong point. Possibility of local contractors, concessionaires, and local maintenance.

Responsible party: U.S. Forest Service

Cost: \$7,800,000

Funding: Congressional funds combined with Partner's contributions

Date: Congress has greatly reduced funding for Recreation Initiative. Williams Fork CIP has

been shelved until 1997, at this time.

As is evident from the ambitious projects currently underway in our action plan, the community is definitely taking positive steps to promote a bright future. Hundreds of volunteer hours have been donated towards accomplishment of these goals. Innovative ideas have helped to come up with funding from many sources. Our accomplishments have made "believers" out of even the skeptical, as we have gotten many projects off the ground and on the way. We see our action plan as a series of milestones all leading towards development of our community.

The following list contains the names and titles of the members of the Economic Development Committee of Kremmling:

DR. JAMES YOST (Committee chairperson), co-owner Latigo Ranch, Inc., professional consultant

(VACANT), Kremmling Town Manager

STEVE DOLAN, Chamber of Commerce member, Kremmling business owner

SUE DUTKO, Administrative Assistant, Kremmling Memorial Hospital

CAROL JARBO, Kremmling Area Chamber of Commerce Director

PEG TOFT, Mayor of Kremmling

DAWNIE BALDO, marketing consultant, High Country Business Development Center Director

JANET OHRI, Ohri Realty

PAUL OHRI, Grand County Commissioner

DR. JOANNE IHRIG, Superintendent of West Grand School District

BILL JANSON, Local business owner

AMY LICHTHARDT, Kremmling Memorial Hospital Board of Directors

BOB BODEMANN, Kremmling Chief of Police

JIM SLOAN, Kremmling Town Board of Directors

JANE LAND, Kremmling Memorial Hospital Board of Directors, local business owner

VICKI CORLETT, Director of Grand Futures (county)

LARRY BANMAN, editor, Middle Park Times

BOB & TOM WHITE, owners/managers, Rocky Mountain Truss, Inc.

JERRY JACK, Bureau of Land Management

LINDA GROSS, Bureau of Land Management, Area Manager

PAUL MOMPER, U.S. Forest Service, District Ranger

DENISE ROBERTSON, U.S. Forest Service, Rural Development Coordinator

DENNIS GALE, U.S. Forest Service, Zone Engineer

DON HOFFHEINS, U.S. Forest Service, Resource Assistant

ANDREW SHEPARD, owner Elk Trout Lodge, Inc.

Appendix E - Evaluation of Routes

Evaluation of Routes

Route Selection Criteria											
PROPOSED ROUTES . Plans Private Land. Available untiling Les Conflicts Resources											
PROPOSED ROUTES . Plans Private Land. Available untiling Conflicts Resources											
ROUTES	Plan	Priv	781	PY	MY HAP	Cou	Dis	Sec	B.O.	Sall	COMMENTS .
Beaver Creek	0	+	+	0	-	-	+	0	+	0	DROP-Wildlife
Buffalo Park	+	+	+	0	-	+	+	-	+	+	DROP-Wildlife
Chimney Rock	+	+	+	0	-	+	+	+	+	+	
Continental Divide	+	+	+	0	-	+	+	+	+	0	
Cow Gulch	+	0	0	+	+	+	+	+	+	+	DROP-Not needed
Elk Mountain	+	+	+	0	-	+	+	-	+	+	DROP-Soil Erosion
Farnham Creek	+	+	+	0	-	+	+	+	+	+	
Fox Loop	+	+	+	+	-	+	+	+	+	+	
Grouse Mountain	+	+	0	0	-	+	+	+	+	+	
Haystack Trail	+	+	+	0	-	0	+	0	+	+	DROP-Use Conflicts
High Rock	+	+	+	0	-	-	+	-	-	+	DROP-Wilderness
Horse Gulch	+	*	0	+	+	+	+	+	+	+	
Jones Pass	+	-	+	0	-	+	+	+	+	+	DROP-Private Land
Junction Butte	0	-	+	+	+	+	+	0	+	0	DROP-Soil Erosion, Safety
Keyser Ridge	+	+	+	0	-	+	+	+	+	+	
Kremmling Cliffs	+	+	+	+	0	+	+	+	+	+	
Little Wolford	+	+	+	+	+	+	+	+	+	+	
Morrison Creek	+	+	+	0	-	+	+	0	+	0	DROP-Location unclear
Muddy Creek	+	*	+	+	+	+	+	0	+	0	DROP-Wildlife Concerns
Pass Peak	+	0	+	0	+	+	+	+	+	+	Mention Private Land
Rabbit Ears	+	+	+	0	-	+	0	+	+	+	
Red Dirt	+	*	+	+	-	+	+	0	+	+	Timing for Wildlife
Routt Divide	+	+	+	0	-	+	+	0	+	+	Wilderness nearby
South Fork	+	+	+	0	-	+	+	0	+	+	
Spring Creek	-	+	+	0	-	0	0	+	+	+	DROP-Wildlife,High Use
Ute Pass	+	+	+	0	-	+	+	-	+	+	DROP-Soil Erosion
Water Tank Hill	+	*	+	+	+	+	+	+	+	+	
Wheatley/Searight	+	+	+	0	-	+	+	-	+	+	Drop-Soil Erosion
Williams Divide	+	+	+	0	-	+	+	0	+	+	Drop-Wildlife
Williams Fork Res.	0	-	+	+	-	+	+	+	+	+	Drop-Private Land
Windy Ridge	0	0	+	0	-	+	+	0	+	+	Drop-Cultural Res,Private
Wolford Overlook	+	+	+	+	+	+	+	+	+	+	
(+) = Meets Criteria; (o) = Some Concern about it; (-) = Does Not Meet Criteria; (*) = Meets but has Special Conditions											

Appendix F - Example of Preference Survey

DETERMINING YOUR PREFERENCES FOR A MOUNTAIN BIKE ROUTE GUIDE

Dear mountain bike enthusiast:

As part of a project for Clemson University Professional Development for Outdoor Recreation program, I will be developing a guide of mountain bike routes in western Grand County, Colorado. Your preferences of the type and format of information to be included in the guide would be helpful. Please respond to the following questions by circling the appropriate answer or writing in the information, and return to the business or person that you received it from by December 20, 1993.

	Thank v	vou for	vour ti	me. Do	n Hoffheins
--	---------	---------	---------	--------	-------------

1.	How	v long have you been riding mountain bikes?						
2.	What	at do you consider your riding ability to be?						
		a) Beginner	b) Intermed	iate	c) Advanced	d d)	Expert	
3.	How	frequently do you ric	de your bike	on: (Check ea	ach one wher	e applicat	ole)	
	a)	Paved roads or par	ths	Never	Seldom	Often	Most of the ti	<u>me</u>
	b)	Gravelled roads (Excounty and main N Forest roads)				*		
	c)	Unsurfaced roads (low use or two trace National Forest and BLM roads)	k					
	d)	Single Track Trails						
4.	How	often do you use the	e following to		•			,
	a)	County, National Fo	orest or	Never	Seldom	<u>Often</u>	Most of the tir	<u>ne</u>
	b)	Special maps (USG Trails Illustrated ma						
	c)	Specific route guide	es or maps					

Mountain Bike Guide Preferences, Page 2

- 5. When using specific route guides or maps, do you have a particular format (or parts of the guide) that you like best? Please review the attached examples beginning on page 3 and show which of the format parts you prefer.
 - a) Map None; <u>Hand sketched</u> maps; <u>Line drawings</u> (computer); <u>Topographic</u> maps; <u>3 dimensional</u> maps.
 - b) Description None; <u>Simple</u> directions only; <u>More detailed</u> to include some route mileages, characteristics and difficulity; <u>Most detailed</u> to include the above plus natural features or historical information.
 - c) Elevation Information None; General <u>written description</u>; Chart of <u>route profile</u> (elevation and mileage); Route profile plus cultural features or landmarks.
 - d) Route Classification/rating None; <u>Type of route</u> only (road vs. single track); Overall <u>difficulty</u> rating; <u>Difficulty and Technical rating</u> with key concerns.
- 6. When using a route guide, do you have a preference to using:
 - a) An overall map showing all routes with descriptions included on margins or on back;
 - b) A book or booklet that has route descriptions and individual maps for each route.
- 7. When using guides or maps what size do you find most useable or convenient?
 - a) Book format Approximately 5-6 inches wide and 6-10 inches tall
 - b) Brochure size map or booklet Approximately 3 1/2 inches wide and 6-10 inches tall
 - c) Pocket size map Approximately 3-4 inches wide and 3-4 inches tall
 - d) Large folded map Approximately 6-8 inches wide and 8-10 inches tall
- 8. Please list any other features that you like to see in route guides (Examples: pictures, equipment and safety information, listing of land management agencies, ethics or "proper use" information)

9.	OPTIONAL - If you would like to, please list your name, address and phone number and show who you would like more information on this route guide for western Grand County, Colorado.	əthei
	Name:	8

Phone:

Address:

I would like more information on this route guide:

Yes

No

Examples from different guides:

MAPS

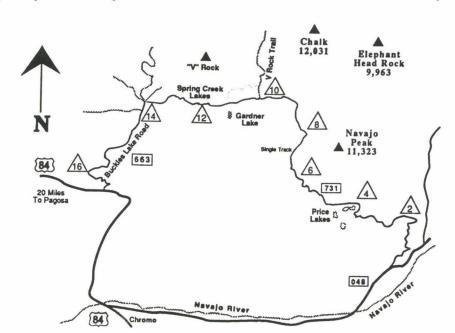
Hand Sketched map

(Example from "The Socorro Country Fat Tire Trail Book")



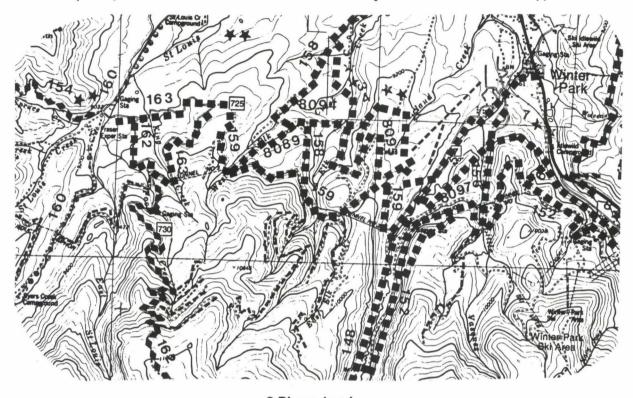
Line drawings

(Example from "Bicycle Routes on Public Lands of Southwest Colorado")



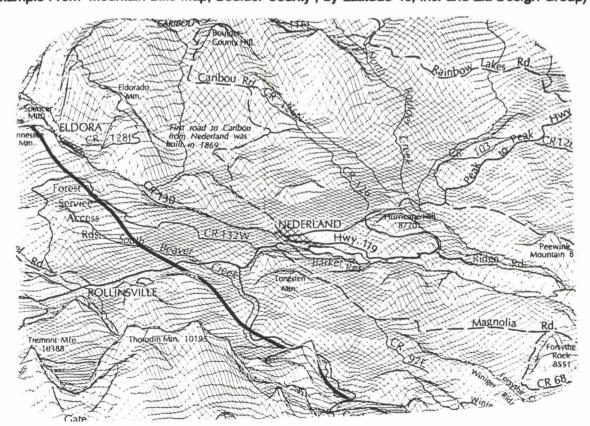
Topographic

(Example From "Winter Park Fats, Fat Tire Society" mountain bike route map)



3 Dimensional

(Example From "Mountain Bike Map, Boulder County"; by Latitude 40, Inc. and Zia Design Group)



DESCRIPTIONS

Simple

(Example From "Mountain Bike Map, Boulder County"; by Latitude 40, Inc. and Zia Design Group)

Description for Sourdough Trail:

Easy to Moderate. Sourdough Trail is one of the most enjoyable single tracks in Boulder County. It consists of rolling terrain gradually climbing towards Brainard Lake Rd. The trail remains mostly in the trees with occasional views onto the plains. The single track can be continued to Beaver Reservoir. This section of trail is more challenging and is best ridden from Brainard to Beaver Reservoir. A short section of bike hiking (15 min.) cuts out considerable time on this section of Sourdough.

More Detailed

(Example taken from "Winter Park Fats; Fat Tire Society" mountain bike route map)

Description for Ranch Creek Loop

Start South on U.S. Highway 40. Continue past Idlewild Campground on the left and Winter Park Drive on the right. Turn left (N) on Corona Pass Road (149) at 1.4 miles. Continue on improved gravel road to Arrow Intersection at 5.2 miles. This is the historic site of the town of Arrow, which once had a population of over 2,000. Turn left (N) onto Road 128 at this 5-way intersection. Downhill to 6.3 miles cross South Fork of Ranch Creek, at 8.3 miles cross Middle Fork of Ranch Creek, at 8.8 miles cross Ranch Creek. Turn left (S) at the "Y" (8102), go downhill. Cross Ranch Creek again at 8.9 miles. Next intersection at 11.3 miles turn hard left (W) on County Road 8 (132), go downhill. Road crosses Ranch Creek again at 13.8 miles. Continue to U.S. Highway 40 at 16.8 miles. Turn left (S) through Fraser, to the town of Winter Park. Full loop is 21.1 miles.

Most Detailed

(Example taken from a draft of an unpublished Colorado mountain bike guide)

Name: Lime Creek Road

Location: This route is between Durango and Silverton, Colorado. It is north of Purgatory Ski Area and south of Molas Pass.

Length: Eleven miles one way.

Configuration: One-way, out-and-back or loop for the "tough ones".

Access: Heading north out of Durango on Highway 550 the southern end is about 30 miles from town. After passing Purgatory Ski Area and Cascade Village there is a large sweeping curve in the highway. Just past this curve there is a good size parking area on the south side where you will see signs for the Lime Creek Road. Coming from the north on Highway 550 out of Silverton, you top Molas Pass and drop down the south side. Just as the highway begins to climb towards Coal Bank Pass the Lime Creek Road turns off to the south.

Route Direction and Trail Conditions: The ride can begin at either end of the road. Described here, the route is one way beginning at the south end. Leaving the parking area, which is just around the big highway curve north of Cascade Village, the road (#591) heads in a general easterly direction for almost four miles. The road rolls over small ridges and through small drainages with some short climbs. It then turns north to traverse well above and then down next to Lime creek. The unsurfaced road is relatively smooth at the beginning and end but is very rocky for much of the route.

Scenery and Highlights: In this part of the Rocky Mountains it is a little unusual to have such a "flat" road for a distance of more than 10 miles. But this was the original highway up to Silverton from Durango and was used by cars and busses over 30 years ago. Abandoned in 1959 when the State Highway Department paved a road over Coal Bank Pass, this route takes you to either side of the pass without the steep climb. Beginning at the southern end in the smooth patterned aspen stands you ride up through a spruce-fir forest with many openings and vistas. A great side trip is a visit to Potato Lake (Milepoint 3) which can be accessed by a one mile trail. This natural sub-alpine lake offers a peaceful setting surrounded by the rocky landscape. If you don't have time for the side trip, at least stop along the lilly-covered beaver ponds near the Potato Lake trailhead. Near Milepoint 4 where the road turns north around a tight bend you'll be treated to spectacular views of the Needle Mountains just outside the Weminuche Wilderness Area (largest in Colorado). And for the "culturally minded" riders you'll be anxious to see remnants of the China Wall, a hand constructed rock "guardrail". At this turn you'll be high above Lime Creek but will quickly drop down where you can find some pleasent fishing or picnicing spots (Milepoint 7). Near the end of the ride (Milepoint 10) you'll note that yellowish-green lodgepole pine trees are more prominant on the surrounding mountainsides then the darker green Englemann spruce. You've entered part of the old Lime Creek Burn. A stop at the interpretative sign along the highway going back up the north side of Coal bank Pass is worth your time to read about the history of the burned area.

Elevation Change: Elevations range from 8800 to 9800 feet above sea level with a total climb from south to north of about 1400 feet.

Difficulty: Easy for the average rider if ridden as a one-way trip. The rocky road surface will make riding difficult for unexperienced riders but the route can be completed in 1-2 hours. The altitude usually offers the greatest difficulty for riders if not from this area. The loop ride is recommended only for intermediate or better riders because half of the route would be on the paved Durango/Silverton highway which climbs over Coal Bank Pass (10,661 feet elevation).

Hazards: This is a great family mountain bike route but it's also used by people driving automobiles, motorcycles and ATVs. So watch out for the other traffic as you ride. A rocky road surface can always cause a spill over the bars if you aren't careful. The altitude and rapid changes in weather and temperature should always be considered a hazard for the unprepared.

Season: Snow thaw to snow fall. Some years this period of time can be very short, but generally the route is accessible from late June to mid-October. The ideal time is early September to mid-October when summer rains have decreased and before snow has accumulated. This is the time to see the fall colors.

Services: Remember, you're going mountain biking; there aren't any services along this route. The nearest would be at Purgatory or Cascade, a few miles from the south end, or the Town of Silverton, about 11 miles from the north end.

Land Status: USDA Forest Service

Maps: The San Juan National Forest Recreation map and the USGS "Engineer Mountain" topographic quadrangle map show the road.

ELEVATION INFORMATION

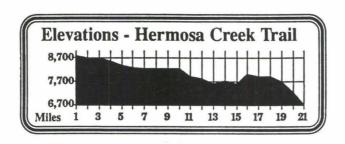
Written Description

Mileage and elevation information for Lime Creek Road route.

Mileage	Elevation	Reference Point
0	8790	Highway 550 (South end)
1	8850	Cascade Lodge
2	9130	
3	9400	Potato Lake trailhead
4	9440	China Wall
5	9180	
6	9070	Along Lime Creek
7	9040	
8	9480	
9	9700	
10	9760	
11	9780	Highway 550 (North end)

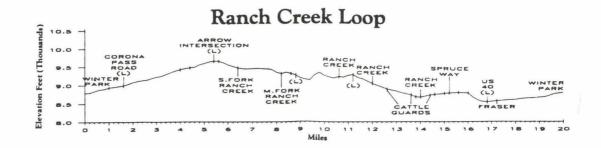
Route Profile

(Example from 'Bicycle Routes on Public Lands of Southwest Colorado')



Route Profile Plus

(Example From "Winter Park Fats, Fat Tire Society" mountain bike route map)



ROUTE CLASSIFICATION/RATING

Type of Route

Some guides list type of route such as highway, backroad, trail, etc. While not actually showing a rating, they imply a level of difficulity or type of technical skills needed.

Difficulty Rating

(Example from "Bicycle Routes on Public Lands of Southwest Colorado")

Two main factors determine a route rating: the physical exertion and the technical skill required.

Easy

Road bike:

0-15 miles, level or easy rolling hills

Mountain bike: 0 -10 miles, hard pack dirt, level or easy

rolling hills

Advanced Road bike:

40-100 miles, hilly in stretches with a few

steep grades

Mountain bike: 20-40 miles, hilly or numerous obstacles,

but 85 percent rideable

Intermediate

Road bike:

15-40 miles, some moderate hills

Mountain bike: 10-20 miles, some moderate hills and rocky

stretches

Expert

More than 100 miles, any combination of Road bike:

terrain

Mountain bike: More than 40 miles, very steep climbs with

numerous obstacles

Difficulty and Technical Rating

(Example taken from "Canyon Country Mountain Biking ... southeastern Utah")

DIFFICULTY

This section summarizes the amount of work involved in completing the trail. An experienced rider will still find any trail easier than an inexperienced biker and, other factors being equal, will burn fewer calories on the same trail. In this section the following factors are identified and taken into account: trail gradients, elevation changes, both net and within the route, and the percentages of wash sand, drift sand, rubble, bare slickrock and other trail hazards. The difficulty rating applies only if the trail is taken as described. Taking a trail in the direction opposite to the described route will usually change the difficulty rating.

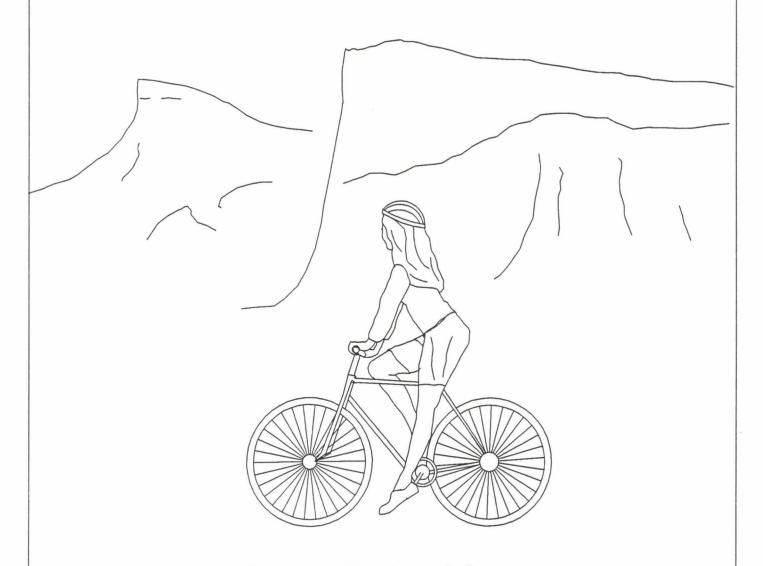
The difficulty ratings used in the trail descriptions are: easy, easy/moderate, moderate, moderate/strenuous, and strenuous.

TECHNICAL RATING

This section will indicate the extent to which a moderately skilled rider can expect to dismount or touch the trail along the route, and therefore the degree to which the trail demands a proper line, or special technique, or both. On an "easy" trail, neither the line nor technique is much of a factor, while they both are on a "moderate" trail. The standard for the "technical" rating is the Moab Slickrock Bike Trail. Some trails offer convenient options for exciting, technical riding literally alongside the easy or moderate route. This trail characteristic is identified in this section.

The technical ratings used in the trail descriptions are: easy, easy/moderate, moderate, moderate/technical and technical. Appendix G - Examples from the Guide

Kremmling Area Mountain Bike Routes



Kremmling Area Chamber of Commerce U.S.F.S. — Middle Park Ranger District B.L.M. — Kremmling Resource Area

Kremmling Area Mountain Bike Routes

Route Number	Route Name	Length (Miles)	Difficulty Rating	Location
1.	Water Tank Hill	4	Easiest	Kremmling Area
2.	Kremmling Cliffs	7	Easiest	Kremmling Area
3.	Fox Loop	6	Easiest	Grouse Mountain Area
4.	Chimney Rock	7	Easiest/More Difficult	Chimney Rock Area
5.	Grouse Mountain	9	Easiest/More Difficult	Grouse Mountain Area
6.	Red Dirt	11.5	Easiest/More Difficult	Red Dirt Area
7.	Little Wolford	7	More Difficult	Kremmling Area
8.	Horse Gulch	13	More Difficult	Kremmling Area
9.	Wolford Res. Overlook	16	More Difficult	Kremmling Area
10.	Farnham Creek	18	More Difficult	Red Dirt Area
11.	Pass Peak	18.5	More Difficult	Kremmling Area
12.	Keyser Ridge	20	More Difficult	Williams Fork Area
13.	Routt Divide	25	More/Most Difficult	Rabbit Ears Area
14.	Continental Divide	18	Most Difficult	Chimney Rock Area
15.	Rabbit Ears	20	Most Difficult	Rabbit Ears Area
16.	South Fork	26	Most Difficult	Williams Fork Area

Kremmling Area Mountain Bike Route

RED DIRT CREEK

LENGTH AND TYPE: 11.5 miles on graveled and unsurfaced roads and trails.

DIFFICULTY: (Easiest to More Difficult - for both physical and technical difficulty). This route is 11.5 miles long with some gentle but sustained grades. Some sections of the closed road along Red Dirt Creek are somewhat difficult to ride because of animal tracks and grass clumps. The section on Road 100 will require that you to ride with care and watch out for vehicles. The steepest climb, just east of Silvercreek Trailhead, is only 1/4 mile long, but may require walking because of rocks and large tank traps. The section through the clearcut is rough, with many rocks or logs. The route requires fording three streams, which adds to the difficulty.

LOCATION: Arapaho National Forest, Red Dirt Area, Northwest of Kremmling, Colorado.

ACCESS: Travel north on Highway 40, six miles from Kremmling. Turn west on Highway 134 for 4 miles and west again on Red Dirt Road (Forest Road 100, County Road 19). Travel 2 miles to the National Forest boundary, another 2 miles to intersection of roads 100 and 101, and 3 miles north on Road 101 to Red Dirt Reservoir.

ROUTE DIRECTION AND TRAIL CONDITIONS: Note: To minimize disturbance to wildlife, please do not use this route until after June 15. Start at the reservoir on Road 101, head north about 1 mile, pass a gate and follow an old road around a drainage and back towards the reservoir. Stay on this old road which is mostly out in the open grassland, as it heads north towards Buffalo Park. A little over 3 1/2 miles from the start, you cross Red Dirt Creek. For the next two miles, the route winds through timber stands and grasslands till it gets to Buffalo Park and Road 100. A hazardous crossing of the North Fork of Red Dirt Creek exists about 1/2 mile before the park (about mile point 5.0). From Buffalo park, proceed south on Road 100 for about 2 1/2 miles to Silvercreek Trailhead. The trail turns east and leaves Road 100 directly across from the trailhead. Go through the trees, cross a small road and climb up through more trees at the base of a small ridge. After about 200 yards you'll intersect an old road that has been blocked with tank traps and climbs steeply to the east. People often camp at the bottom of this steep section so be considerate of them. One quarter mile from the trailhead, you top the hill and continue to follow this closed road. The route turns south, east and northeast on old roads and skid trails till it reaches a clearcut area. You finally intersect a much wider road which you take to the southeast. It descends about 1 1/2 miles to a gate and some short switch backs. After going through the switchbacks, you again head southeast on this main road. A little over 1/2 mile down the road you will intersect Road 101 where you then turn back northeast for a 1/2 mile ride to the reservoir.

SCENERY AND HIGHLIGHTS: The reservoir is very scenic with the sagebrush, aspen and lodgepole pine covered slope as a backdrop. There is a lot of variety along the route as it traverses along grass parks, wetlands and stands of pine. On this route you may get glimpses of wildlife, including elk and deer. Fishing in the reservoir or along Red Dirt Creek before or after your ride offer relaxation and perhaps a supplement to your next meal.

HAZARDS: The stream crossings, especially the one at the North Fork of Red Dirt Creek, just south of Buffalo Park, and riding with summer traffic on Roads 100 and 101 create the greatest hazards.

SERVICES: None - Red Dirt Reservoir is a heavily used recreation area but has no facilities. Camping is allowed on National Forest Lands. Please bring a port-a-potty if you're staying overnight and haul out all trash. With advance reservations, Latigo Ranch (only three miles from the reservoir) offers week long, full service guest ranch facilities and activities.

LAND STATUS: National Forest.

MAPS: Routt National Forest; U.S.G.S. 1:24,000 Tyler Mountain Topographic Quad.

SOURCES OF ADDITIONAL INFORMATION:

Middle Park Ranger District

Kremmling Chamber of Commerce

P.O. Box 1210

P.O. Box 471

Kremmling, CO 80459

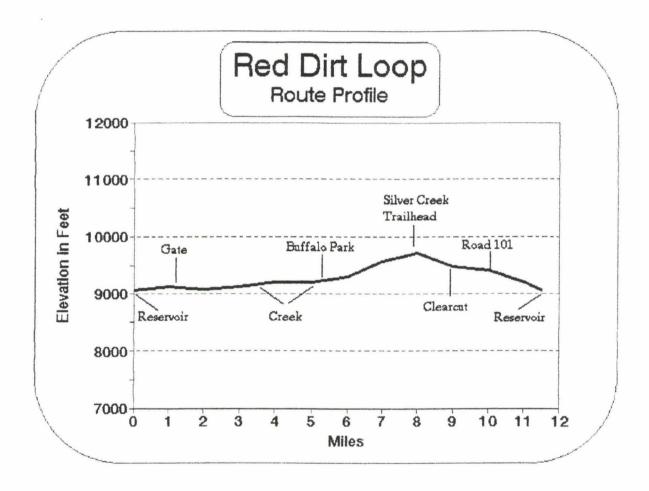
Kremmling, CO 80459

303-724-9004

303-724-2472

OTHER ADJACENT ROUTES:

The Farnham Creek Loop is described in this guide. In addition, numerous roads are open to bicycling. Note: the trail heading west out of Silvercreek Trailhead is not open to mountain bikes.





Red Dirt Loop Road 100 to Rabbit Ears Pass and Highway 40 Forest Boundary Red Dirt Loop (Easiest to More Difficult) Buffalo Park LEGEND Route Designator Described Route—Main Roads Described Route—Other Areas Main Roads Main Roads Secondary Roads District and Forest Boundary Private Land Boundary Streams Mile Designations Along Route Gate/Cattleguard 00 Silver Creek Trailhead V Red Dirt Reservoir Peak | 9390 | Feet Private Land Forest County Road 19 To Highway 134 and Highway 40 To Kremmling

Kremmling Area Mountain Bike Route

KEYSER RIDGE LOOP

LENGTH AND TYPE: 20 mile loop, mostly on open, graveled roads.

DIFFICULTY: (More Difficult - based on physical difficulty; Easiest to More Difficult - based on technical skills needed). This route requires a long steady climb up Keyser Ridge (7 miles at a 5% grade), some route finding after you pass the trailhead and begin to drop off the ridge (may require walking or carrying your bike for 1/4 mile).

LOCATION: Arapaho National Forest, Williams Fork Drainage, Southeast of Kremmling, Northeast of Silverthorne, Colorado.

ACCESS: From Kremmling, travel east on Highway 40, one mile past Parshall, and turn south on County Road 3 towards Williams Fork Reservoir. Travel 15 miles south, mostly on graveled roads, to a parking area on the Arapaho National Forest. From Silverthorne, head north on Highway 9 for 14 miles, then turn east on Summit County Road 15 (Ute Pass turnoff) and travel 8 miles up and over the pass. After veering north around Henderson Mill, drop down to the end of the pavement, and travel another 3 miles north on a graveled road (Grand County Road 3, Forest Road 138). The parking area is located just south of the intersection of Roads 138 and 139 near Horseshoe Campground.

ROUTE DIRECTION AND TRAIL CONDITIONS: Begin at the parking area, head north towards Horseshoe Campground (near intersection of Forest roads 138 and 139), then travel east on Road 139 for 1 mile; this is a graveled, well-traveled road. Turn south on Road 140, cross Keyser Creek and begin the climb up Keyser Ridge. This is a much less traveled but well-maintained road. There are many side roads, but stick to the main road for just over 7 miles to the Keyser Ridge Trailhead. At the trailhead, turn south on a closed road. Note: Road 140 loops back to the north and the Keyser Ridge trail (not open to bicycles) heads east. Follow the old road south about 1 mile, through some cutover timber stands to a sharp switchback, then about another 1/2 mile (now heading north) till you get to another opening. About halfway through this opening the trail will drop down to another road at the bottom. Walk or carry your bike down to the lower road. Follow this old spur road south about 1/4 mile and it will make one sharp switchback and drop down to intersect with Road 141. Turn south on this well-maintained road, which will eventually turn west and take you down Kinney Creek to the main Williams Fork Road (#138), a little over 4 miles. Turn north and travel another 5 miles back to the parking area. This last section can be rather dusty and have a lot of "washboards". Traffic can be heavy on weekends.

SCENERY AND HIGHLIGHTS: The Williams Fork Drainage is very scenic with landscapes ranging from sagebrush covered slopes to rugged alpine peaks. You will see all these from this route; although you will mostly be traveling through dense lodgepole and spruce-fir timber stands. This is by no means a pristine area; both private and National Forest lands have been managed intensively. You will see "clearcuts", other roads and the Henderson molybdenum milling operations including large tailings ponds. (Ever wonder where the term Chrome-moly comes from for many mountain bike frames?). You will also have very picturesque views of surrounding mountain ranges and valleys from some of the higher elevations along the route. You will see Byers Peak Wilderness to the east and Eagles Nest Wilderness to the west. You will have a chance to see elk, deer and maybe even moose as well as many other species of birds and small animals.

HAZARDS: Few - walking through the cutover unit to connect the end of Road 140 with 141 could cause some problems. The descent down Road 141 can be rather quick so care should be taken to control your speed to avoid on-coming vehicular traffic.

SERVICES: Horseshoe Campground is near the starting point and two other campgrounds are 8 miles to the south on Road 138. All three of these are "Fee Areas" and are usually open Memorial Day through October. There are guest ranches in the area for those who want to "rough it", easily. Between Henderson Mill, West Gas and Forest Service employees in the area, there is often someone that can be contacted in case of an emergency.

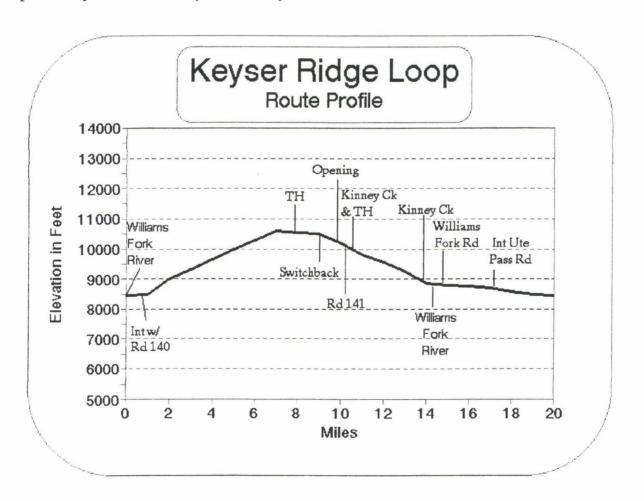
LAND STATUS: National Forest, although you do pass through private land on a county right-of-way when on Forest Road 138 (Grand County Road 3).

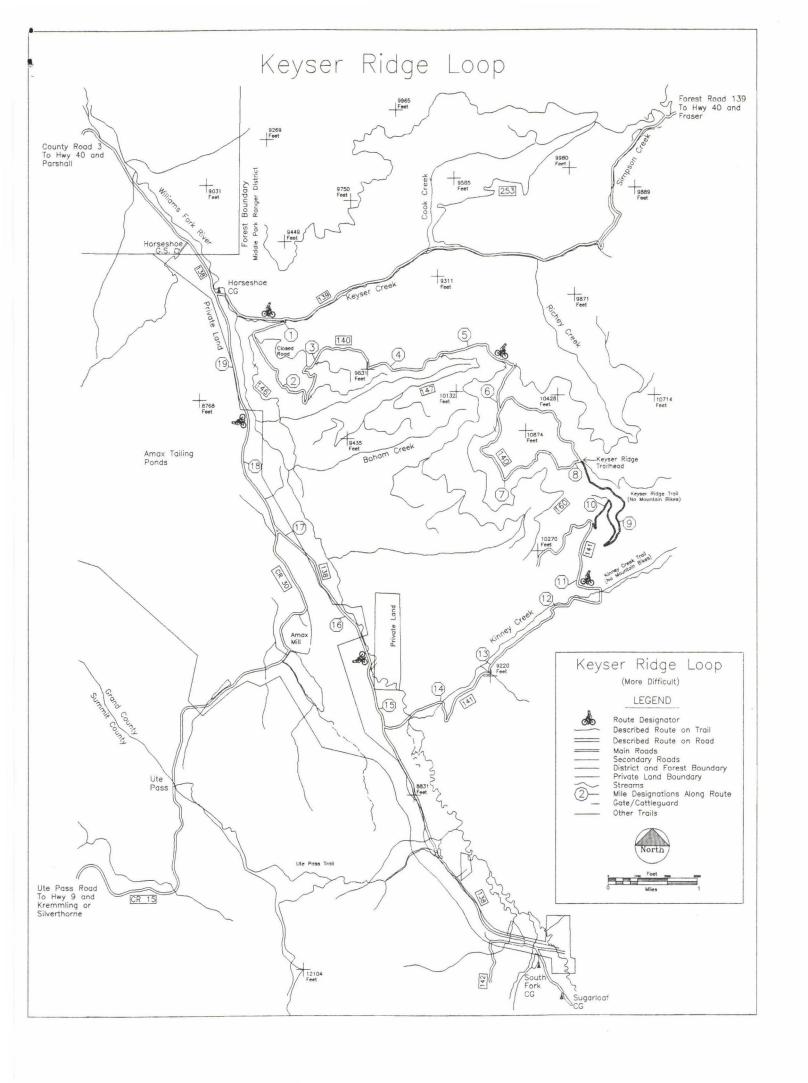
MAPS: Routt National Forest; U.S.G.S. Topographic Quads - Sylvan Reservoir and Ute Peak. Be sure to ask for the newer series maps so they will show all the roads in the area.

SOURCES OF ADDITIONAL INFORMATION:

Middle Park Ranger District P.O. Box 1210 Kremmling, CO 80459 303-724-9004 Sulphur Ranger District P.O. Box 10 Granby, CO 80446 303-887-3331 Kremmling Chamber of Commerce P.O. Box 471 Kremmling, CO 80459 303-724-3472

OTHER ADJACENT ROUTES: Two additional "loops" are available on Keyser Ridge (Road 140 to 147 to 146 loop, and Road 140 to 141 to 160 loop). These are only for the adventurous, because the short connections between the roads are not currently marked. Many other roads in the area are open for riding. Be careful in your route planning: none of the trails in the immediate area of Keyser Ridge are open to bicycles because they enter the Byers Peak Wilderness.





Appendix H - Project Coordination

Project Coordination for Development of the Kremmling Area Mountain Bike Guide

Most of the contacts made during the project are listed under the primary reason for the contact:

Approval of the Project and Routes and Collection of Information

U.S. Forest Service (9 units), U.S.D.I. Bureau of Land Management (2 levels)
Colorado S.C.O.R.P., Colorado Bicycle Coalition, International Mountain Bike Association
Colorado State Parks, Colorado River Water Conservation District
Colorado Division of Wildlife (4 areas), Colorado State Land Board
Private Landowners (3 locations)

Determine user Preferences and Get Examples of Guides

Bike Shops (4), Bike Club, Private Individuals Latitude 40, Trails Illustrated, Adventure Cycling Sheridan County Chamber of Commerce Colorado State Parks, BLM State Office

Community Involvement

Grand County Planning, Headwaters Trails
Kremmling Economic Development Committee
Upper Colorado Alliance, Kremmling Area Trails Association
Kremmling Town Manager, Kremmling Area Chamber of Commerce
National Park Service

Partnerships for Funding

Wilderness Society, Specialized Bicycles, Inc.

Adventure Cycling, Colorado University-Community Development
Grand County Manager, Jackson County Administrator
U.S. Forest Service, U.S.D.I. Bureau of Land Management
U.S.F.S. State and Private Forestry, Colorado State Parks
Grand County Colorado Tourism Board, Kremmling Rotary
Grand Cycle Station, M.D.G. and Associates, Headwaters Trails
Kremmling Town Manager, Kremmling Area Chamber of Commerce
Grand County Historical Society, Coors Brewing Company
J.F.M. Corporation, Colorado Trust, Boettcher Foundation
Chinook Fund, Needmor Fund, Private Individuals